THE THEORY OF MAH JONG

K. W. LOCK WEI

FT MEADE
GenColl

Class GV1299
Book .M3W4
Copyright No.

COPYRIGHT DEPOSIT

THE THEORY OF MAH JONG

THE THEORY OF MAH JONG

ITS PRINCIPLES, PSYCHOLOGY, TACTICS, STRATEGIES, AND FINE POINTS, INCLUDING THE COMPLETE CHINESE RULES OF PLAY

BY

W. LOCK WEI

Captain of China's Davis Cup Tennis Team, 1924

ASSISTED BY

LAM PING LEUNG

Columbia University

BOSTON

SMALL, MAYNARD & COMPANY

PUBLISHERS

GV1299
.M3W4

Copyright, 1925
By SMALL, MAYNARD & COMPANY
(Incorporated)

25-8027

Printed in the United States of America

THE MURRAY PRINTING COMPANY
CAMBRIDGE, MASS.
THE BOSTON BOOKBINDING COMPANY
CAMBRIDGE, MASS.

MAR 31 1925
© CI A823564
W 1

TABLE OF CONTENTS

CHAPTER I

PAGE

Introduction 3

CHAPTER II

Description of the Game 5
Names of the cards 5
Object of the game 6
The straight 6
Three of a kind 8
Four of a kind 9
Preliminaries to playing 10
Drawing the original hands 11
The game at play 11
Calling and wooing 12
Rounds of play 13
Precedence 13

CHAPTER III

Settlement of Scores and Scoring Rules . . 14
Settlement of scores between the players . . 15
"Dead" hands 15
Counters for settling scores 15
The scoring chart 16
Special complete hands 18
Strict and liberal constructions 21
Examples illustrating the scoring rules . . . 23
Penalties 26
Flowers and Seasons 26

CHAPTER IV

PAGE

FUNDAMENTAL PRINCIPLES 28
Formations of cards 28
What cards to discard 30
The checking method 32
Making use of the left-hand person's discards . 32

CHAPTER V

ADVANCED FUNDAMENTAL PRINCIPLES 34
Diagnosing your opponents' plays . . . 34
The principle of versatility 35
The principle of flexibility 36
Calling as many chances as possible 39

CHAPTER VI

MISCELLANEOUS PROBLEMS AND FINE POINTS . 42
Two processes of interchange of cards . . . 42
Why four of a kind is not always claimed . . 46
Playing for safety 46
Winning on comparing scores 47
Outguessing the left-hand person 47
Conspicuousness, a failing factor 48
While calling 48
How to fish the single eye 49
Mental calculation 50

CHAPTER VII

LUCK: ITS PHENOMENA 51
Superstition and luck 51
Nature of luck 51
The luck cycle 52

PAGE

Luck as depending on individuals 53
Facts substantiating the luck phenomena . . 53
What some well-known writers on probabilities have to say 54

CHAPTER VIII

Application of Luck 56
Blackbridge's opinion 56
Utilizing the period of good luck to the greatest extent 56
How to lose the minimum in a state of ill luck . 58
Changing of luck — mechanical means . . . 59

CHAPTER IX

Some Speculative and Experimental Calculations 62
Some basic computations 62
The average original hand calculated experimentally 62
To determine the relative advantage and disadvantage of retaining an honor in favor of some other tile 64
Exceptions to the above rule 66
To determine the least number of cards of the same "numbers" suit on the original hand before trying for an all-one-suit hand 66
Fallacy of consistent playing for high-scoring hands 67
The improvement by the draws of the strong and weak hands is in inverse ratio 68
Skill versus chance 68

CHAPTER X

PAGE

MAH JONG PSYCHOLOGY 70
Subjective and objective observations . . . 70
Some most common indications of players' state of mind 71
Attitude of calling 71
Maintaining the right kind of attitude . . . 72
Psychology of bystanders 72
Inductive and deductive reasonings 72

CHAPTER XI

MAH JONG METHODS 74
"Cleared-Hand" 74
"One-Double" 74
Chinese method or "The Mixed Suit" . . . 75

THE THEORY OF MAH JONG

CHAPTER I

Introduction

Two years have elapsed since the Chinese game Mah Jong was first introduced into America. Along with the widespread popularity of the game, numerous articles, pamphlets and books on the subject have appeared. Too many volumes concerned solely with detailed instructions of the game have already been written. While the authors agree that Mah Jong presents a vast field for the application of skill, none of them has yet given an exhaustive exposition of the principles of correct play.

This volume is an elaborate treatise on the principles, theories, tactics, strategies and fine points of the game. While the application of skill constitutes its main theme, the part on instructions or rules of the game has received no little attention. In writing this part, I have in mind the rules given by American writers, and the heated controversy over the different codes in use. Almost every writer claims that his set is genuine; as a matter of fact, many mistakes and deviations from the Chinese rules can be found in each code.

Inaccurate information of a different nature is also numerous. It is, however, beyond the scope of this treatise. Only one case will be mentioned here. There was a rumor, undoubtedly started by some manufacturers of Mah Jong sets in this country, that the Chinese played several different kinds of Mah Jong, the most notable of which were the "coolie" and the "official" games. "This dispute waxed hot and furious, and, according to gossip, frantic appeals were made to the Far Eastern Division of the State Department. It is reported that Mr. V. A. Murray, chief of the Division, and one of the technical advisers to the Washington Conference, spent

many weary days poring over the archives of the American foreign office from the days of the late John Hay, clear on down through Robert Lansing and Bainbridge Colby to the dynasty of Charles E. Hughes, but had to give it up. Then the Chinese Legation was appealed to, and none other than His Excellency, Dr. Sao Ke Alfred Sze, Minister Plenipotentiary and Envoy Extraordinary from the Republic of China to the United States of America, settled the matter for all time by issuing an unofficial statement to the effect that there is only one Chinese Ma Chang game, call it what you will." [1]

Enough has been said to make clear the object with which this work is written. There still remain several points to be mentioned. For the description of the game, which covers Chapters II and III, the terminology has been chosen on the principle of universality. Any method which aids the reader to grasp the meaning thoroughly justifies its place in the book; this naturally favors the adoption of those terms which are already in use. Chapters VII and VIII, devoted to "The Phenomena of Luck" and its application, contain expert opinion by Chinese players. The methods suggested for play during periods of good and ill luck are interesting and instructive.

During the tennis season of 1924, I have had the pleasure of playing with and instructing a host of Mah Jong enthusiasts, both experts and novices, at Newport, Lenox and other cities, where my tournament program happened to take me.

In solving their problems and answering their questions, I have gathered much material for the discussion in the last chapter of this treatise.

[1] J. B. Powell, "Ma Chang Invented in China Spreads all Over the World." *The China Weekly Review*, Vol. XXV, 5, p. 8.

is not necessary to say anything, since otherwise it would be his turn to draw.

Four of a Kind. As in other cases, the 4 cards must be in the same suit.

Examples of four of a kind:

A hidden four of a kind.
An exposed four of a kind.

Four of a kind is not an essential part of the game; it does not in any way assist the possessor to complete his hand faster. Its function is to give the possessor some extra points.

Four of a kind may be either hidden or exposed. By "hidden" we mean that the 4 cards are all drawn by oneself. An exposed four of a kind may be formed in one of two ways: (1) By securing the fourth card discarded by any player to the 3 already held in hand; (2)By drawing the fourth card to an exposed three of a kind. Four of a kind is termed a "kong."

Unlike the straight or three of a kind, a kong must be placed on the table, whether exposed or hidden. If the kong is not placed on the table, it can be counted as three of a kind only when someone wins. When one has a kong, he draws an extra card, called the "loose tile." The loose tile is the first card on the other end of the wall. The loose tile is drawn because a kong makes the hand one card short.

To kong is not obligatory. It is also permissible for the possessor to pung a fourth card but expose only three of a kind, retaining one card for any further purpose. If at any time he wants to claim the full points of a kong, he can add his card to the exposed 3 after any of his draws from the wall, and not after claiming a discard.

Preliminaries to Playing

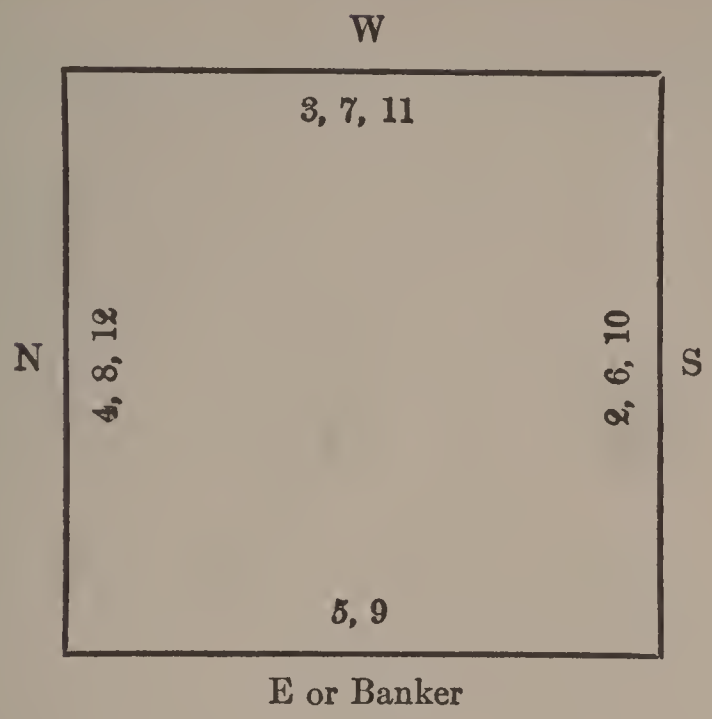
Determining Players' Seats. Seats may be determined by any convenient method. A more formal way is the following procedure, which may be performed by any player: Shuffle the 4 discs and place each one face down on each side of the table. Each player takes one side of the table at random. Pick out 4 winds, shuffle them face down and place them in a row with one odd and one even "numbers" suit card at each end. Throw the dice once. The number thrown indicates the player who draws first, counting the thrower as one and counterclockwise. If the number is odd, he draws the card from the end next to the odd "numbers" suit card; if even, he draws from the other end. The player at his right draws the next card, and so on. Then the discs are opened, and each player will find his seat, the player with the East Wind taking the seat where the East disc is, and so forth.

Sometimes the first banker is decided at the same time by the above procedure. The player drawing the East seat will be the first banker. If not so agreed, the player drawing the East seat will then throw the dice twice. The total number minus one indicates who is to be the first banker.

Building the Wall. The next thing is the building of the wall. The cards are all shuffled face down. Each player builds one side of the wall, 17 tiles long and 2 tiles high.

Breaking the Wall. There are two ways of doing this.

(1) The simple way. The banker throws the dice. The number thrown not only designates whose wall is to be broken, but also at what point it is to be opened. The count always starts with the banker as one and in a counterclockwise direction. For instance: if a 7 is thrown, the West Wind opens the wall by counting off 7 rows, starting from right to left. The following diagram shows the various numbers which may be thrown and the corresponding walls to be broken.



The banker is always the East Wind; his right-hand person is the South Wind; his opposite person is the West Wind; his left-hand person is the North Wind.

(2) The complex way. The banker throws the dice to determine whose wall is to be broken. Then the player whose wall is indicated throws again to decide at what point it is to be opened. The grand total of two throws designates this point. For instance: if a 7 is thrown, then West Wind throws again. If he throws an 8, then he counts off 15 rows. Of course, if the grand total of the two throws exceeds 17, the count is continued to the next wall.

Drawing the Original Hands. As soon as the wall is opened, East Wind draws 2 rows or 4 cards from the left of the opening, followed by South Wind, West Wind and North Wind, until each has 12 cards. Then East Wind takes 2 more, the first and the third top cards; the other players take one each in their proper turn.

The Game at Play. The game proceeds in a counter-clockwise direction; that is, East Wind starts the game first, followed by South Wind, then West Wind, then

North Wind, then East Wind again, and so on. East Wind, having one card more than the others on the original deal, discards first without making a draw. All discards are placed face up inside the walls. Then each player in his turn draws a card from the wall and discards one; this process goes round and round the table. When a player pungs or chows a discard, he does not draw any card from the wall, but proceeds to make a discard. The fact that one must have 13 cards at all times, except when he has a kong, explains why after a pung or a chow he cannot draw a card from the wall. It will be seen that after a pung, one or two players may lose their turns.

By drawing, punging, and chowing, the four players are gradually improving their hands. When a player has organized four sets of cards and a pair, he has completed his hand and wins from the other three players. After the score is settled, another game begins and the same procedure is repeated, starting with the shuffling of cards and the building of the wall.

The last 14 cards of the wall are not to be drawn. If no one completes his hand when this point is reached, the game is declared a draw — no one wins or loses. The player drawing the last card makes no discard. For every loose tile drawn one more card is added to the 14 undrawn cards, so that:

If no loose tiles drawn.....14 undrawn cards
If 1 loose tile drawn.....15 undrawn cards
If 2 loose tiles drawn.....16 undrawn cards
If 3 loose tiles drawn.....17 undrawn cards
And so on.

Calling and Wooing. When a player has yet to wait for just one card to complete his hand, he is said to be "calling." When he has completed his hand, he is said to be "wooing." (In this book the words "to complete," "to woo," and "to win" are used interchangeably; sometimes one and sometimes another is used in order to suit the meaning of the particular passage.) When a player woos, he does not make any discard; the complete hand, therefore, normally has 14 cards.

A player can woo by punging, by chowing, and by "fishing the single eye."[1] In all cases, the caller has an immediate claim on the needed discard. For instance, a player has a pair of 2 circles and 5-6 characters, the other cards being on the table. He is calling 4 and 7 characters. Should either card be discarded by any player, he can have an immediate claim on it and declare his hand completed. Unlike chowing in the ordinary sense, the caller depends on the discards of all players, and not those of his left-hand person alone.

Should a player complete his hand by drawing the needed card, he must expose this card before displaying his hand, in order that the other players may identify it.

Rounds of Play. Four rounds constitute a complete period of play. The first round is the East Round; the second, the South Round; the third, the West Round; the last, the North Round. The Prevailing Wind of each round is that of the round; for instance: the Prevailing Wind of East Round is East.

After each game, the bank is passed to the player on the right, except when East Wind himself wins or when he draws the last card in a drawn game, in which cases the bank is not passed. Thus the bank rotates around the table. When the fourth player fails to win, the second round, the South Round, begins. After four rounds of play, if the players agree to continue the game, the loser or losers have the privilege of requesting a re-choice of seats.

Precedence. If two players claim the same card at the same time, the one punging it has the precedence over the one chowing it. Any player calling has the precedence over one punging or chowing. If two players are calling the same card, the one sitting nearer to the discarder in the usual counterclockwise direction has the precedence over the other. If a discard is at the same time claimed by three players who are calling, the player next to the discarder has precedence.

[1] "Fishing the single eye" means to obtain a second card to make the necessary pair in order to complete the hand.

CHAPTER III

Settlement of Scores and Scoring Rules

Glancing over the many publications by various authors, one is disturbed by the diversity of rules among them. One writer insists that his set of rules is authentic; another claims that his is official; a third calls his rules standardized.

Where the writers differ most essentially is in regard to the scoring rules. A word of explanation for this variation is perhaps necessary.

With regard to some rules arising from the question of *taste*, diversity is but a natural consequence. Some people favor a limited game, while others favor an unlimited one; some favor a base score of 10 points and others a base score of 20 points. In like manner the stakes of the American poker game vary from "the sky is the limit" to the limited penny game. With regard to other rules arising from the question of *customs*, diversity is likewise inevitable. These variations are usually very slight and imply unimportant details; as, for example, the question whether or not there is such a thing as "plain wooing" completed by drawing. It is these variations that make up the so-called table rules. Owing to these natural differences, standardization of rules, I think, should best go within certain boundaries.

But a third kind of diversity of rules requires more serious attention. It is one of the results of dragging the game into commercialized practices. Some American writers, on account of their unfamiliarity and lack of experience with the game, give inaccurate and erroneous rules with regard to scoring. It may also be possible that these and others purposely refuse to play the game in the Chinese way, but describe their own rules as an

improvement over the original. In both cases these new rules should not be followed. The game of Mah Jong is already near perfection, and any rash attempt to improve it will simply tend to degrade it.

Settlement of Scores between the Players. East Wind always wins or loses twice the score.

The winner collects from each of the 3 players the full value of his hand. The 3 players (or the losers) settle the differences between their scores.

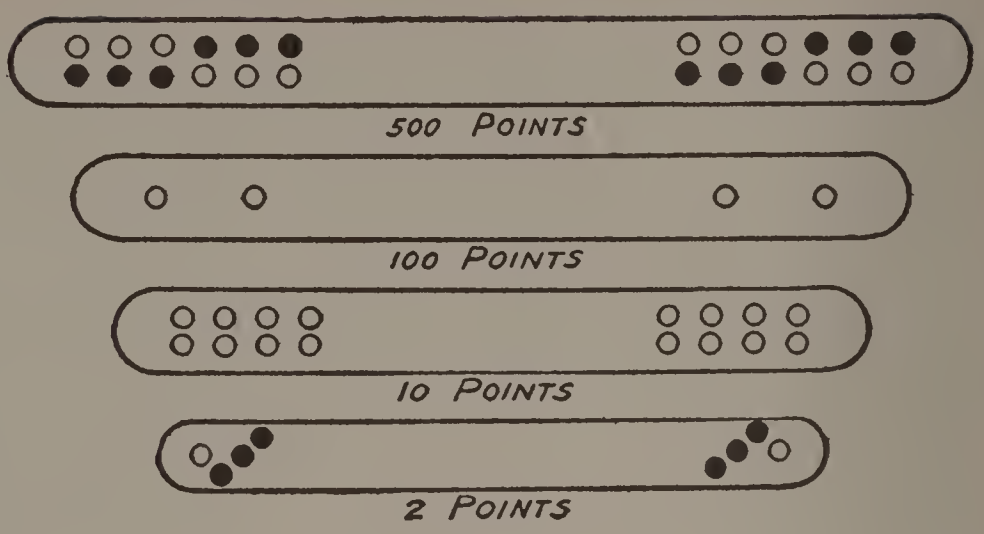
The game is usually played with a limit, which varies from 300 to 600 points. The idea is to restrict too heavy losses. East Wind can win or lose as much as twice the limit. The limit sometimes applies only to the complete hand; sometimes it applies to both complete and incomplete hands. Before the game, an agreement will settle the question.

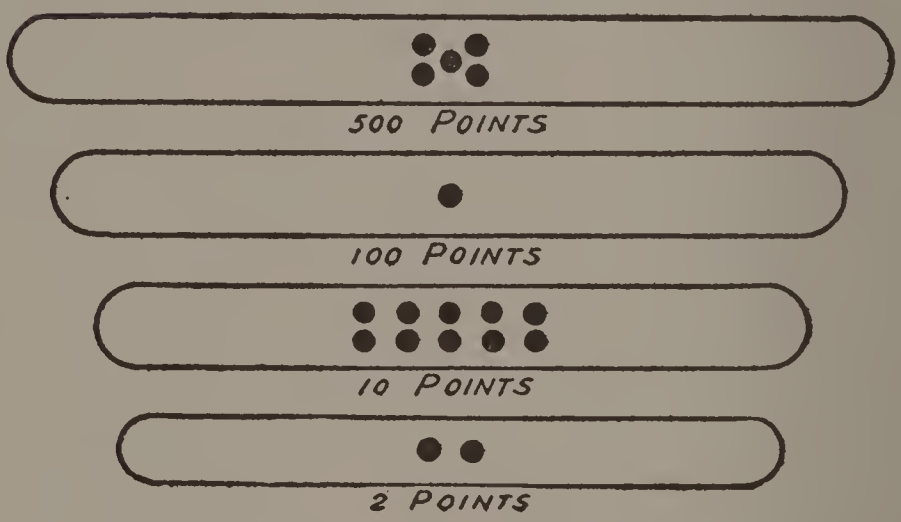
"Dead" Hands. If, at any stage of the game, a player's hand contains more than the proper number of cards, his hand is "dead," which means that he cannot complete it. At the end of the game, he must pay to the winner and the other two players their full scores. If, at any stage of the game, a player's hand contains less than the proper number of cards, his hand is also "dead"; but at the end of the game, he is entitled to count his score in settling with the losers. In both cases, the holder must continue drawing and discarding as usual.

Counters for Settling Scores. Each player, before the game starts, is given a number of counters for the purpose of settling scores.

Usually each player starts with 1,000 points, represented by counters as follows:

1 500-point counter.....	500 points
4 100-point counters.....	400 points
9 10-point counters.....	90 points
5 2-point counters.....	10 points
Total.....	1,000 points





The Scoring Chart

1. All straights, whether exposed or hidden, have no scoring value.

2. The own wind of East Wind is East; that of South Wind is South; that of West Wind is West; and that of North Wind is North.

"Prevailing Wind" means the wind of the round.

"Own and Prevailing Wind" means the wind of the player's own wind, at the same time the wind of the round.

3. For each double multiply the final total score by 2 once.

For instance, if the total score is 20 points,

Then, 1 double $=20\times2$ $=$ 40 points
2 doubles $=20\times2\times2$ $=$ 80 points
3 doubles $=20\times2\times2\times2$ $=160$ points
4 doubles $=20\times2\times2\times2\times2=320$ points

And so on.

4. By base score is meant the extra points added to a complete hand. This score is usually 10 points, although by agreement one may use a 20 or more point base score.

I. Applies to All Hands

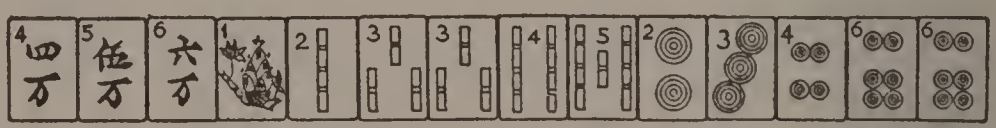
	Exposed		*Hidden*	
	Points	*Doubles*	*Points*	*Doubles*
Three of a Kind				
Middle tiles (2, 3, 4, 5, 6, 7, 8)	2	0	4	0
End tiles (1, 9)	4	0	8	0
Winds	4	0	8	0
Own Winds	4	1	8	1
Own and Prevailing Winds	4	2	8	2
Honors	4	1	8	1
Four of a Kind				
Middle tiles	8	0	16	0
End tiles	16	0	32	0
Winds	16	0	32	0
Own Winds	16	1	32	1
Own and Prevailing Winds	16	2	32	2
Honors	16	1	32	1
A Pair				
Own Winds, Prevailing Winds, Honors	..	..	2	0
Own and Prevailing Winds	..	..	4	0

II. Applies to Complete Hands Only

Base score[1]	10 points
Drawing winning card	2 points
Filling a middle or one-sided combination	2 points
Fishing the single eye { middle tiles	2 points
Fishing the single eye { heads and ends	4 points
"Winning on the roof"[2]	1 double
"Robbing a kong"[2]	1 double
Winning on drawing last card[2]	1 double
For no straights[2]	1 double
All-one-suit hand[3]	3 doubles
Mixed-one-suit hand[4]	1 double

Special Complete Hands

(1) Plain Wooing. This hand consists of all straights and no scoring group. One double is given, making the total score 20 points. If the card completing the hand is drawn, the score is 12 by 1 double, or 24 points. Some players contend that, since plain wooing must contain no scoring group, drawing the winning card, which at once allows the drawer 2 points, can never constitute the hand plain wooing; the correct score, they say, should be 12 points.



Note that the pair of eyes must not be own winds or honors, for a pair of own wind or honors scores 2 points.

[1]See p. 17.

[2]Some players allow 10 points instead of 1 double. See p. 22.

[3]An American writer states that this rule applies to all hands. That is to say, as soon as a player has collected 13 cards of the same suit, he is entitled to a 3-double score. This is a fundamental mistake. Doubling is not inherent in the "numbers" suit; it is on account of the peculiar nature of the composition of this complete hand that doubling is made possible. On this assumption alone the score of 3 doubles is granted to an all-one-suit hand.

[4]The same writer states that this rule applies to all hands. This is equally erroneous; the same argument as above can be extended here.

(2) Mixed Ones and Nines. The hand consists of triplets[1] of ones, nines, winds, or honors. One extra double is allowed. Since this hand contains no straights, it scores at least 2 doubles.

(3) Lesser Three Scholars. There are included two triplets of two of the honors and a pair of the third honors in the hand. One extra double is allowed. Such a hand, therefore, scores at least 3 doubles.

Below is a list of Full Houses. Full Houses are complete hands which score the limit, whatever it is.

(4) Heavenly Grace. When East Wind opens his original 14 cards and finds the hand already complete, the hand is called Heavenly Grace.

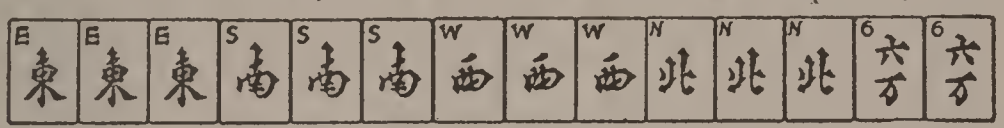
(5) Earthly Grace. If East Wind's first discard completes any player's hand, the hand is called Earthly Grace.

(6) Pure Ones and Nines. The hand consists of triplet of only ones and nines.

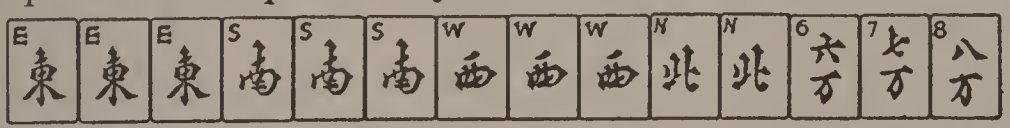
(7) All Symbols. The hand consists of triplets of winds and honors. Since such a hand scores at least 4 doubles, the limit score is allowed.

(8) Greater Three Scholars. There are included triplets of all the honors in the hand.

(9) Four Blessings at the Door. The hand consists of 4 sets of winds, the 4 sets either all triplets, such as



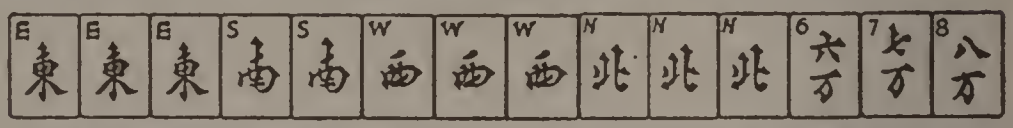
or 3 sets of triplets and the fourth set a pair of eyes, except that the pair of eyes must not be the own winds.



The Prevailing Wind is East, and the holder of this hand is South Wind.

[1]Triplet is another word for three of a kind.

But if the pair of eyes is own wind, then the hand is not a full house. Only one extra double is allowed.

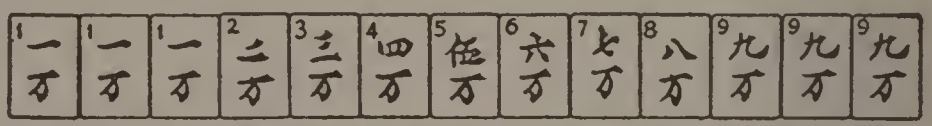


The Prevailing Wind is East, and the holder of this hand is South Wind. The total number of doubles in this hand is 3: 1 for East Wind, 1 for mixed-one-suit, and 1 extra double.

(10) Buried Treasure. The hand consists of 4 sets of hidden threes of a kind or fours. The pair of eyes must also be completed by drawing.

(11) If the above hand consists of sets of *fours only*, then the pair of eyes may be completed from an outside discard.

(12) Calling Nine Cards. This is an all-one-suit hand, all concealed in hand, the arrangement of which is such that any card of the suit discarded or drawn will complete the hand.



If the holder himself draws or any player discards a character, the hand is a Full House.

(13) The Thirteen Wonders. The hand consists of the 13 different heads and ends, one of which is paired. This is the only exception to the usual make-up of a complete hand.

This hand is considered all-powerful. A player calling on this hand is exempted from paying penalties under the rules laid down on cases (2), (3), and (4) of that section. The usual rules governing precedence do not apply to this hand; it always has the first claim.

(14) Getting the Moon from the Bottom of the Sea.[1] The hand is completed by drawing the last card in the wall, when the card happens to be one circle.

[1]See next paragraph.

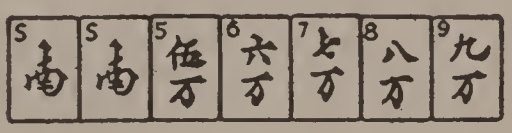
(15) Getting a Plum Blossom.[1] The hand is completed by drawing a loose tile after a kong, when this loose tile happens to be a 5 circle.

Strict and Liberal Constructions. The causes for the inconsistency of the American authors in writing down the rules, especially in regard to scoring, have been noted before. There is another very significant cause, perhaps more responsible than any other, that accounts for this inconsistency. In interpreting the scoring chart and the many special hands, there are two views which are widely current among the Chinese players today. They are the strict and the liberal constructions;[2] the one view restricts the counting of the score to the narrowest limit possible, the other view allows the scorer to claim the largest score possible. From what the authors have written, it is apparent that they have not realized the widespread existence of these two views; hence their inconsistency.

Broadly speaking, these are the differences between the two schools:

(1) Where there is more than one way of arranging the concealed sets in a complete hand, the school of liberal construction allows the holder to choose the way which may yield the largest score, while the other school compels him to adopt the way which yields the least score.

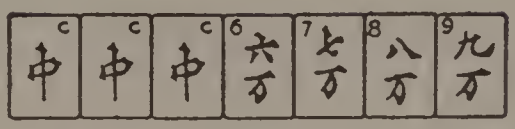
Examples:



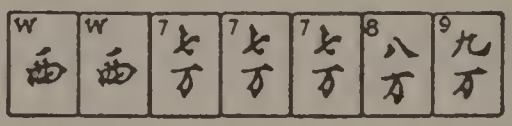
Either a 4 or a 7 character will complete this hand. Now suppose someone discards a 7 character. The liberal constructionist asserts that the 7 character fills the one-sided combination 8–9 characters and claims an extra of 2 points. The strict constructionist asserts that, since there are two possibilities in completing the hand, no extra points can be allowed.

[1]See next paragraph.

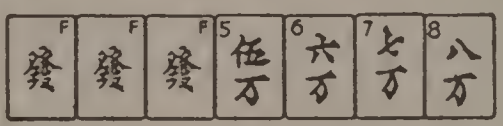
[2]The two terms are borrowed from political science.



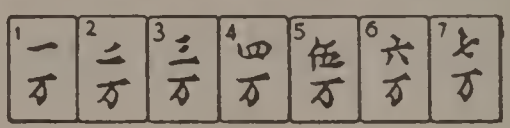
Suppose someone discards a 6 character. The liberal constructionist claims 2 points for the completion of the pair of eyes; the strict constructionist refuses the 2 points on the ground that a 9 character would have completed the hand just as well.



Suppose someone discards a 7 character. The liberal constructionist claims 2 points for filling a one-sided combination and 4 points for the hidden triplet of 7 characters, a total of 6 points; the strict constructionist allows 2 points for an exposed three of 7 characters, a total of 2 points.



Suppose someone discards a 5 or an 8 character. The liberal constructionist states that this is a case of fishing the single eye.



According to liberal construction, it is even possible to fish the single eye where there are in reality three possibilities.

(2) "Winning on the roof," winning on drawing the last card, "Robbing a kong," no straights — the school of liberal construction allows one extra double for any of these hands; the school of strict construction allows ten extra points.

The school of strict construction does not recognize these two hands — "Getting the moon from the bottom of the sea," and "Getting a plum blossom." In each case, the usual ten extra points is allowed.

(3) The school of strict construction recognizes only one kind of plain wooing. Drawing the winning card does not fulfill the requirements of plain wooing. See page 2.

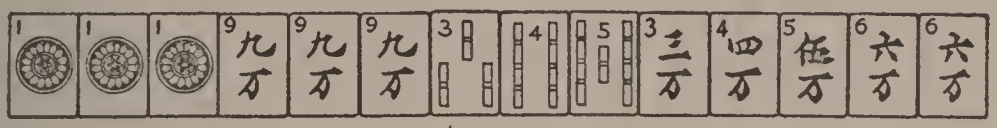
(4) The school of liberal construction usually sets 500 points as the limit full-house score; the school of strict construction usually sets this at 300 points.

Before the game, the players should agree on which view they are to follow in counting scores.

Examples Illustrating the Scoring Rules

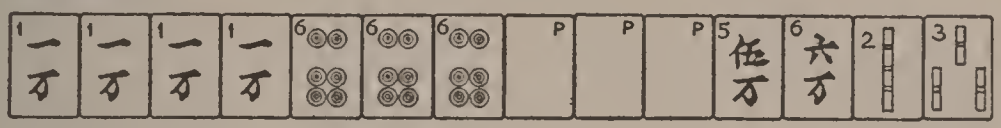
Example I

A's Hand

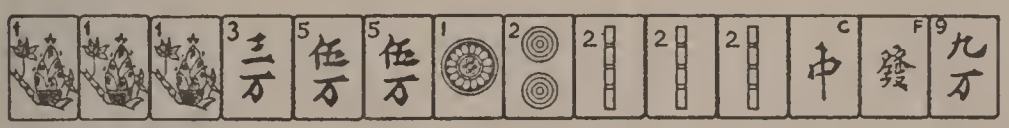


This is the winning or complete hand. A completes his hand by fishing the 6 character.

B's Hand



C's Hand



D's Hand
Banker

A. Winning Hand

Exposed 3 of 1 circles (end tiles)	4 points
Exposed 3 of 9 characters (end tiles)	4 points
Two straights	0 points
Fishing the 6 character (according to liberal construction)	2 points
Base score	10 points
Total	20 points

B

Exposed 4 of 1 characters (end tiles)	16 points
Exposed 3 of 6 circles (middle tiles)	2 points
Exposed 3 of white honors	4 points
Total	22 points
One double for the 3 white honors	44 points

C

Hidden 3 of 1 bamboos (end tiles)	8 points
Exposed 3 of 2 bamboos (middle tiles)	2 points
Total	10 points

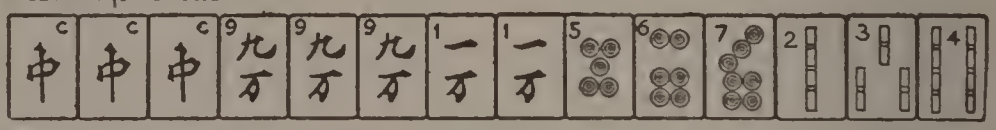
D. Banker

Exposed 3 of red honors	4 points
Exposed 3 of 3 characters (middle tiles)	2 points
Total	6 points
One double for the 3 red honors	12 points

In this example, A wins the game, and collects 20 points from both B and C and 40 points from D, who is the banker.

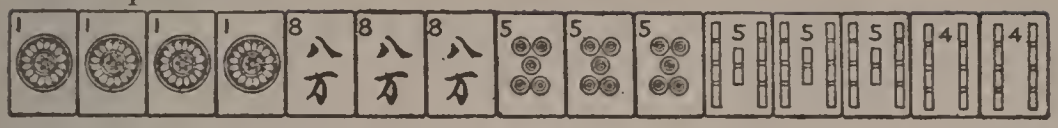
After paying off A, the other three players, B, C, and D, settle the differences between their scores. B, having 44 points, collects 34 points from C, who has 10 points, 32×2 or 64 points from D the banker, who has 12 points. D, having 12 points, collects 2×2 or 4 points from C, who has 10 points.

Example II



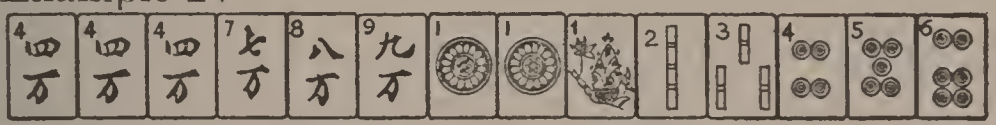
Hidden 3 of red honors	8 points
Exposed 3 of 9 characters (end tiles)	4 points
Filling a middle combination (3 bamboo)	2 points
Drawing the winning tile	2 points
Base score	10 points
Total	26 points
One double for the 3 red honors	52 points

Example III



Exposed 4 of 1 circles (end tiles)	16 points
Exposed 3 of 8 characters (middle tiles)	2 points
Exposed 3 of 5 circles (middle tiles)	2 points
The hidden 3 of 5 bamboos[1]	0 points
Base score	10 points
Total	30 points
One double for "Winning on the roof"	60 points
One double for no straights	120 points

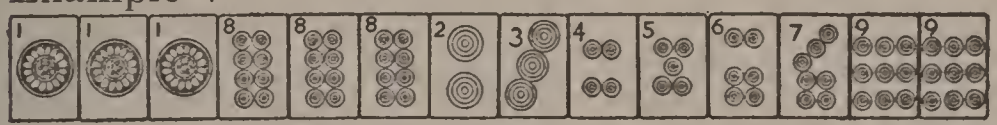
Example IV



Exposed 3 of 4 characters (middle tiles)	2 points
Base score	10 points
Total	12 points

This is the smallest of all winning hands.

Example V



Hidden 3 of 1 circles (end tiles)	8 points
Hidden 3 of 8 circles (middle tiles)	4 points
Drawing the winning card	2 points
Base score	10 points
Total	24 points

Three doubles for all-one-suit hand.

First double	48 points
Second double	96 points
Third double	192 points

[1]It is customary after "winning on the roof," when one extra double is given, to allow no score to the last winning set.

Penalties

(1) False claim. Every player should be careful to make no mistake when declaring a complete hand. If, after the hand is exposed, a mistake is discovered in his hand, he has to pay to every player points equivalent to the limit. No other score counts and the bank passes.

(2) Nine cards of the same suit on the table. When a player has exposed nine cards of the same "numbers" suit on the table, no player is allowed to discard any card of that same suit. If anyone makes such a discard, and the discard completes that player's hand, provided it proves to be an all-one-suit hand, the discarder will be held responsible for all losses. If the discard is punged or chowed by the player, who later on draws the winning card, the discarder will also be held responsible for all losses. In case the discarder himself has an all-one-suit hand,[1] or in case he has no other cards to play except those of the "forbidden" suit, he is exempted from paying the penalty.

When a penalty is imposed, no other score counts.

(3) Three sets of ones and nines on the table. When a player has exposed three sets of ones and nines on the table, no player is allowed to discard any ones or nines. If anyone makes such a discard, and the discard completes his pure ones and nines, the discarder is held responsible for all losses.

(4) Similarly, when a player has exposed three sets of winds, no player is allowed to discard the fourth wind. When a player has exposed two sets of honors, no player is allowed to discard the third honor.

Flowers and Seasons. When Mah Jong was first played, the use of Flowers and Seasons was the rule rather than the exception. The number of these cards varied from 4 to 16. Today, among expert players especially,

[1]In some places, exemption is also made if the discarder is calling on a 2 double score hand. More frequently, exemption is made if the discarder is calling on a 3 double score hand, regardless whether or not the hand be all-one-suit.

their use has become obsolete. Nevertheless, many people still prefer a game with such cards, and these few lines have been added to describe their functions.

Flowers and Seasons are additional cards and have nothing to do with the making-up of sets.

The most common number of these cards used is 8, 4 Flowers and 4 Seasons, numbered from 1 to 4 or marked E, S, W, N.

Each wind is represented by a Flower and a Season in the above order.

Each Flower or Season counts 4 points. Each own Flower or own Season counts 4 points and 1 double. Holding the whole set of Flowers or of Seasons counts for 1 extra double.

	Points	*Doubles*
One Flower	4	0
One Season	4	0
One own Flower	4	1
One own Season	4	1
A set of Flowers	16	2
A set of Seasons	16	2

Whenever a Flower or Season is drawn, it is at once exposed on the table. The fact that Flowers and Seasons have nothing to do with the making up of sets makes it necessary for the drawer of each Flower or Season to draw a loose tile. After the original deal, each player lays down all his Flowers and Seasons and draws the necessary loose tiles; the procedure starts with East Wind.

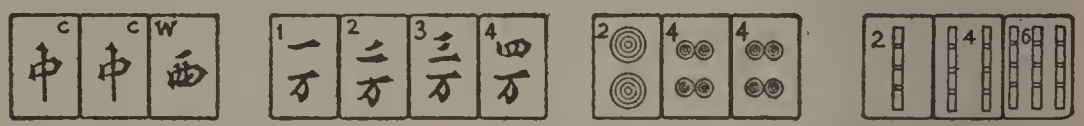
The 8 additional cards make it necessary for each player to build a wall 18 tiles long instead of 17.

CHAPTER IV

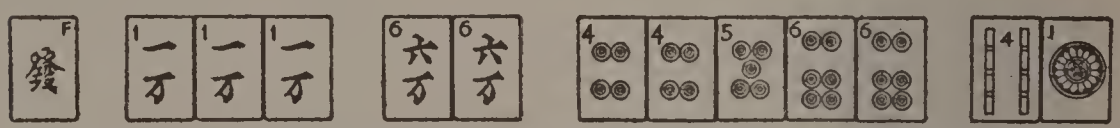
Fundamental Principles

Formations of Cards.

The Novice's Method. A novice picks up his 13 cards, and groups them according to their suits. He arranges them in such a way as to leave a little space or a break between every suit or set of cards which by themselves form a somewhat logical relation. His arrangement, then, would appear something like the following illustrations:



The novice has the habit of putting the honors and winds (cannons) at the left-hand corner.



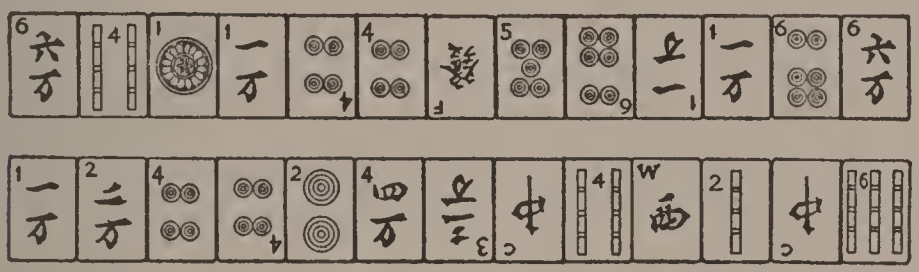
The 3 of 1 characters and the pair of 6 characters, although being the same suit, are sometimes separated, so that the different groups of cards can be more distinctly recognized.

Such an arrangement has serious defects. His opponents, by watching carefully where he puts in his draws and from where he makes his discards or to where he shifts the cards, can tell almost exactly what his cards are. By so doing, it is like playing with one's cards face open, while his opponents have their cards concealed.

The Ordinary Method. As the novice gains more experience, he will gradually abandon his first practice and will place his cards close together in a single straight line. This is a great improvement over the first method and is the one most widely employed. This arrangement is, however, not intricate enough to escape the detection of the more observant players.

The Mixed Formation. The experienced Chinese players have developed another arrangement, called the Mixed Formation. By this we mean that the 13 cards as they are picked up are not classified or arranged in any order at all and cards drawn in are placed wherever convenient. This formation prevents detection even of the keenest observers.

Examples of the Mixed Formation



This method, likewise, has its limitations, for none but the very experienced players can use it successfully. When an unseasoned player attempts it, nothing but strain and confusion will follow, with the result that he forgets to chow or to pung, makes wrong discards, or even commits the most costly error of making a false claim,[1] in which case he is heavily penalized.

A combination formation recommended. The most effective formation is the combination of the ordinary method and the mixed formation. It requires less strain and effort to operate this than the mixed formation. One of the strongest points in its favor is that it eliminates the numerous chances of making the various mistakes common to the mixed formation. It has for its foundation the ordinary method in that the first 13 cards obtained by the deal are arranged according to their suits or sets. Then as the game progresses the draws are placed in whatever places that are convenient regardless of their connection with the cards in the hand, which is the main feature of the mixed formation.

[1]See p. 30.

What cards to discard. Just as in chess, the usual question of the beginner is, What are the several correct preliminary moves to be made? So in Mah Jong, similar questions arise. What cards should be discarded first? What should be the right cards to get rid of?

Single winds other than own wind should be discarded at the first opportunity. It is most probable that in the early stages of the game your opponents seldom have pairs of their own winds in hand, but the further the game progresses, the more chance there is for them to form pairs from their draws; thus they are enabled to pung your late discards and double the score of their hands. On the other hand, you should keep your own wind as long as possible, unless two or three have already been discarded. Some people think that the Prevailing Wind should also be kept. If there is reason to discard the winds, there is more reason to discard the Prevailing Wind.

Next you should discard the end tiles of the "numbers" suits rather than the middle tiles. Even a casual examination will show that straights on middle tiles are easier to form. Of the middle tiles, the 2's and 8's are less useful than the rest, and should be discarded before the latter. Take a 2 circle, for instance, and see how many possibilities there are which may convert the single 2 circle into useful combinations. You will find four; namely, 1 circle, 2 circle, 3 circle, 4 circle, which will make the following combinations respectively: 1–2 circles,[1] a pair of 2 circles, 2–3 circles, 2–4 circles. Now compare it with, for instance, a 4 circle or any circle from 3 to 7. You will find more possibilities in this case, 2 circle, 3 circle, 4 circle, 5 circle, 6 circle, which will make the following combinations respectively: 2–4 circles, 3–4 circles, a pair of 4 circles, 4–5 circles, 4–6 circles. For the group of tiles numbering from 3 to 7 there are still further peculiarities, although, counting their possibilities of being improved into useful combinations, they are the same. A

[1]For the sake of convenience, 1–2 circle combination is often written 1–2 circles; others may be inferred.

cautious examination will show that the threes and sevens occupy a vital position, which makes it inadvisable to discard them at all. A 3 may be chowed by one of the following combinations: 1–2, 2–4, 4–5, of which one is one-sided, one middle, and only one both-ended. A 4 may be chowed by one of the following combinations: 2–3, 3–5, 5–6, of which two are both-ended and only one middle. Now the theory is, rather let your discard be chowed by a both-ended combination than by a one-sided or middle combination; for while the person holding a both-ended combination can easily draw the needed card if you do not give it to him, this is more difficult for the person holding a one-sided or middle combination. Therefore, unless you are forced to (as, for example, when you are calling), always keep the threes and sevens as long as possible.

Summing up the preceding discussion, we would find a discarding schedule as follows:

First. All winds other than the own wind.

Second. Ones and nines.

Third. Twos and eights.

Fourth. Honors. (For reasons of this assignment see pp. 64–65.)

Fifth. Fours, fives, sixes.

Sixth. Threes and sevens.

Seventh. Own wind.

This schedule is only a general direction of order, and it is not intended that it shall be followed to the very letter. Indeed it is highly undesirable to do so, for the player would then be playing a mechanical game instead of a versatile game.

One's discards should also be guided by many conditions. For instance, the discards in the inside space of the walls should be noted by each player. Generally speaking, it is better to follow the old cards than to play new cards. Again, towards the end of the game, it is not feasible to discard any winds or honors, which would give one's opponents a good chance to complete a big hand.

The term "Letting off a cannon" means discarding an honor or a wind at this dangerous period.

The Checking Method. It is of importance that every player should carefully watch the discards of the other three players. This enables him to make a fair estimate of his opponents' hands and by means of such knowledge he can exercise control over his opponents. The checking method is directed against the person on your right. The control consists in delaying his completion of the hand by refusing him any chance to chow your discards. To this end several ways are employed. One of these is to try to play the same cards that he has discarded; that is to say, to follow his discards. It is obvious that he cannot chow your 2 circle when he has previously[1] discarded one himself. Secondly, by taking his discards into consideration, you can calculate what cards are useless to him and discard accordingly. For instance, if he has discarded a 7 character, he can rarely chow your 8 or 9 character; and if he has discarded a 2 circle and a 5 circle, he can rarely chow your 3 or 4 circle. Thirdly, if you discover that he is discarding bamboos and characters and not any circles, you can be reasonably sure that he is forming an all-circle hand, and you must stop discarding any circles, for if you do not, you will be aiding him to complete his hand.

Incidentally, all discards of winds and end tiles are working towards the purpose of the checking method.

Making Use of the Left-Hand Person's Discards. When you come to deal with the left-hand person, your policy should be to make the best use out of his discards. Your skill is your capacity to anticipate what cards he will keep and what ones he will discard. Other things being equal, you should save the cards of the suit he has the least use for, and discard the cards of the suit which he is saving; for thus you will be able to take more chows from his discards. For instance, if you have several disconnected circles and characters, your choice of which ones to dis-

[1]Provided not too long previously.

card *first* should be influenced by the discards of the left-hand person. Should he save circles and discard characters freely, you should keep the characters and discard the circles, and vice versa. Or again, when you have a choice to break either 1–2 bamboos or 1–2 circles, you should be influenced likewise; that is, you should break the former if he seems to have no use for circles; the latter, if he seems to have no use for bamboos.

This plan and the checking method are sometimes supplementary to each other. Under certain circumstances both plans may be used together. To take a concrete case, suppose you have a choice to break either 5–6 circles or 2–3 bamboos. Ordinarily you would follow old cards. But suppose the right-hand person has discarded a 4 bamboo and the left-hand person a 6 circle. Then you should break the 2–3 bamboos, since the right-hand person cannot chow them, and keep the 5–6 circles, since the left-hand person has not much use for 4 and 7 circles. In this play, you accomplish two purposes at the same time.

CHAPTER V

Advanced Fundamental Principles

Diagnosing Your Opponents' Plays. Importance has already been attached to the rule that every player should watch the discards of the other three players. It is upon the observance of this rule that the checking method is based; and the same is true of the plan of how one can best utilize the discards of the left-hand person.[1]

Indeed, it is no exaggeration to say that almost one-half of the beginner's faults lies in the fact that he concentrates too much of his energy in building up his own hand and pays no attention at all to his opponents. Without thus consciously studying his opponents, it would not be possible to diagnose their plays.

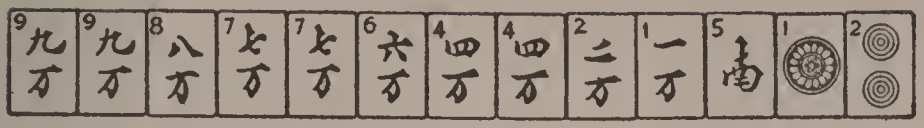
First, you should examine how your opponents arrange their cards and to what positions they put in their draws. Such a close scrutiny will reveal many minute details of their hands. A few diagrams will make this point clear.

In hand

On the table

In this example, the play has progressed to some extent. If any player discards a green honor, and the player under close scrutiny pungs it and then discards the 5 character, we could guess the contents of the two parts separated by the broken wall, which is caused by the removal of the green honors. The two cards on the right are most likely characters, while the remaining two on the left are either a pair of red honors or of white honors, less likely to be anything else, because many players have the habit of grouping the cannons together and at the left-hand corner.

[1]See pp. 39–41.



All in hand

In this example, the player first chows a 3 character to the 1–2 characters and discards one of three cards at the end. Next, he pungs to his pair of 9 characters and discards another of the three cards at the end. Then it is safe to conclude that the remaining portion of his hand except the one card at the end contains that same suit, characters.

When a player at the outset of the game discards middle tiles and not winds or end tiles, contrary to the general principle,[1] it is an indication of one of two things. Either he has a fairly organized hand and is not far from calling; or he is attempting to build up a strong hand, usually the all-one-suit hand or the mixed one-suit hand. When a player during the early or the middle stage of the game discards an honor with great reluctance, it *may* be an indication that he has a pair or three of honors or his own winds. Generally a person is quite willing to discard his single honor or honors, if his hand contains no doubling value. But having a hand with a doubling value or with such possibility, he greatly desires to obtain a still stronger hand by holding his single honors. With the average player, it is human nature that prompts him to the action; with the player of mathematical mind, it is found to be expedient to so retain his honors[2]— for two doubles is four times the score of the original hand and not three times, while one double is merely twice the score.

A player who discards characters and circles only is likely to be planning an all-bamboo hand. Should he sit on your right, it is sometimes good strategy to discard a bamboo to see if he needs it or shows signs of having need for it. In either case that should be the last bamboo discarded by you.

The Principle of Versatility. As you are constantly trying to diagnose your opponents' plays, so your plays

[1]See pp. 46–47.
[2]See p. 18.

are treated by your opponents in the same manner. Your object then is to strive towards outguessing your opponents, and here the principle of versatility comes into play. One common fault of the mediocre player is that his play is a mere persistent pushing in a given direction; in other words, we can describe his every action in the language with which we describe mechanical movements. Versatility consists in the employment of variations of plays and means to the attainment of your goal; your opponents are consistently kept in perplexity and can never be sure what you are striving at.

Sometimes indeed it is necessary to *sacrifice* something in order to be versatile. To discard a middle tile at the outset instead of a wind or an end tile is an obvious violation of a fundamental principle; but at times it pays to sacrifice whatever advantage there is in order to keep your opponents in suspicion that you are starting to build an all-one-suit hand.

Versatility also includes adaptability in recognition of some new demand of circumstances or some new opening of opportunity. One varies his methods of play in the different periods of luck; generally speaking, an offensive game is required when in good luck and a defensive game when in ill luck.[1] One must not be too resolute in his determination of policy. Let us suppose that you are building up an all-character hand and that you are successful except for a 5-6 bamboo combination. Let us suppose then that you realize suddenly that the player on your right is building an all-bamboo hand and that he is on the verge of completion — may be calling. At such a critical moment, you should change your determined policy by keeping the two bamboos. In the first place, it is quite possible that he is calling the very bamboos in your hand. In the second place, you are given the precedence to win over him in case someone happens to discard a bamboo that completes both your and his hands.

The Principle of Flexibility. Fundamentally the game

[1]See Chapters VII and VIII.

of Mah Jong is a test of the ability of organization; efficiency in organization, then, must constitute your primary purpose. When circumstances are such that it is plainly evident that you cannot woo, your primary purpose must be temporarily abandoned; and your policy then will be to favor the player with the smallest possible score to win or to make a drawn game. Hence such policy should constitute your secondary purpose.

The function of the principle of flexibility is to aid in accomplishing these two purposes.[1] By flexibility I mean that your cards are so organized or arranged as to be capable of various adjustments and instant reshaping when situations demand. The following rules may well be borne in mind:

(1) *Facility of linkage the all-important rule.* Cards of the same suit connected together and concealed in the hand afford the best facility of linkage. The longer the string of connection, the better the facility of linkage, so that such a string allows you to make use of almost any card of the suit drawn by yourself or discarded by the left-hand person. For instance, work out the possibilities in the sequences of 3, 4, 5, 6, 7 characters, of 2, 3, 4, 5, 6, 6, 6 bamboos and similar sequences.

From this is evolved the rule that *too many pairs violate the principle of flexibility.* As pairs have no linkage value, too many pairs in a hand lessen the probability of completing the hand. It is often advisable to split a pair in favor of retaining a both-ended combination, the latter having 8 chances for improvement against the 2 of the former.[2]

[1]All principles, in a sense, aid in accomplishing the purposes under discussion; but they do not aid in as direct a manner as does the principle of flexibility.

[2]Of course, one can pung the discards of all players and can chow only those of the left-hand person. But if the following computation is correct, then a both-ended combination still has advantage over a pair:

There are 8 tiles that will fill a both-ended combination and there are two ways of getting one of these tiles, either by drawing or by chowing. There are 2 tiles that will fill a pair and there are four ways of getting one

(2) *In trying for an all-one-suit hand,* the application of the above rule is all the more obvious. The 5 occupies the center position and unites linkages from numbers both below and above. A pair of 5 ought never to be punged; for by doing so the continuity of the whole hand is at once cut off and destroyed. Even any pair of the middle tiles ought not to be punged without careful consideration.

(3) *Certain combinations,* by nature of their positions, are less flexible than others. 8–9 circles is less flexible than 7–9 circles, though both have the same number of chances, *viz.,* 4, to become a straight. 7–9 circles is a middle combination, but if a 6 circle is drawn back, it becomes a both-ended combination; and in this sense, it is more flexible than 8–9 circles, which cannot so transform itself into a both-ended combination. Similarly you will find that the 5–7 circles is more flexible than 7–9 circles. Now 5 holds the center position; the rule is, the nearer the combinations to 5, the more flexible they are.

(4) *The danger of holding only one card.* Holding only one card in hand is a blunder which the expert never commits. There are but three chances for the completion of the hand and there is the disadvantage of the card being guessed. Most important of all, however, is the unfortunate predicament that the holder is sometimes placed in. In the case of emergency, when an opponent is calling on a strong hand, he would have no choice of cards to play; of the two cards, red honor and green honor, he must discard one.

To be effective when encountering an emergency, the flexibility of a hand should not be impeded. A four-card hand like this, 3–4 circles and 6–7 bamboos, has ample flexibility or elasticity to meet any emergency; and should any one of the four cards be drawn, the hand becomes a

of these tiles, by drawing or by punging the discards of any one of the three players.

Then the ratio of filling the both-ended combination is to filling the pair as 8×2 is to 2×4, 16 to 8, or 2 to 1.

calling hand with two possibilities. There is every objection to chow a discard to any of the two combinations so as to restrict the hand's elasticity to a minimum.

With a four-card hand like this, a pair of white honors and 1–3 characters, the pair of honors should not be punged unless absolute safety is assured.

Calling as Many Chances as Possible. Closely connected with the principle of flexibility, and in fact akin to it, is the subject, "Calling as many chances as possible." By way of justifying my treatment of this as a separate topic, I would suggest that, as most novices and many average players cannot recognize all the possibilities in a calling hand, this paragraph is especially devoted to this phase of the game — calling.

Two terms, I think, must be distinguished. The word "possibilities" signifies the number of *different* cards that can complete a calling hand, a combination, or a sequence of combinations. With a calling hand like this — a pair of white honors and a pair of 1 circles — we say there are two possibilities: either a white honor or a 1 circle will complete the hand. The word "chances" signifies the *total number* of cards that can complete a calling hand, or so forth. With the hand just mentioned, we say there are four chances. This usage of the two terms is adopted in this chapter and elsewhere.

It will be seen that, generally speaking, the more possibilities there are in a calling hand, the more chances there are; but often this is not the case. Frequently when two hands have the same number of possibilities, one hand has more chances than the other. In a hand like this, a pair of North Winds and a pair of 4 characters, its possibilities are two and its chances are four. A hand like this, a pair of North Winds and 3–4 characters, has likewise two possibilities, but its chances are eight. Sometimes one hand has more possibilities and less chances than another. A hand like this: 7, 8, 9, 9, 9 characters and a pair of 2 circles, has three possibilities and seven chances; whereas the hand mentioned above with two possibilities has

eight chances. The conclusion follows: *always call as many chances as possible;* although, incidentally, this virtually means as many possibilities as possible.

Unless forced to do so, it is never good policy to fish the single eye, which has but three chances for the completion of the hand — the least of all calling hands. Fishing the single eye is sometimes the result of drawing a third card to, or punging, the eye pair; and this, of course, can be avoided and should be avoided, for a few extra points cannot compensate the great reduction of chances of wooing. A hand depending on two of its pairs as the calling places is another difficult hand to win. Many Chinese writers on the subject argue that such a hand is even worse than a hand depending on a middle combination to fill as its calling place, though both hands have four chances for their completion. Admitting that there is some truth in their argument,[1] I maintain, however, that the reverse is true. Here I must resort to the principle of flexibility to sustain my argument. Compare the flexibility of these two hands, for instance: A — a pair of 4 circles and a pair of 6 bamboos; B — a pair of 4 circles and 4-6 bamboos. Both hands have four chances for completion; hand A, however, is more capable of being altered into a calling hand of eight chances, that is, any of these four cards if drawn back, 3 circle, 5 circle, 5 bamboo, 7 bamboo, will accomplish the purpose; but for hand B, only a 3 or a 7 bamboo can so alter it. Similar cases may easily be arranged and compared.

[1]Their chief argument is this: It is more common for one or two opponents to hold two similar pairs of the caller than for them to hold the four cards that are needed to fill the middle combination.

The following table has been prepared with a view to familiarize the reader with the number of possibilities and chances in different calling hands.

Calling Hands

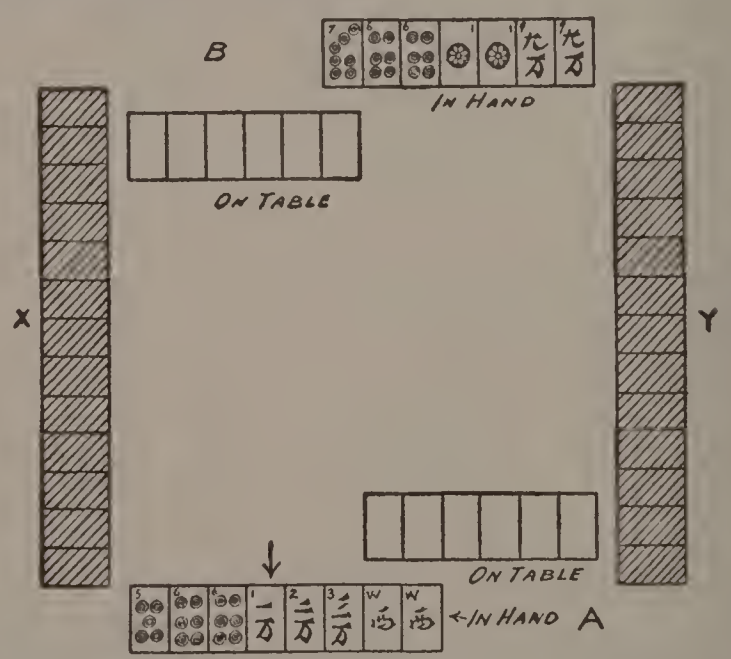
(Each group of figures being cards of the same suit)		*Possibilities*	*Chances*
The other nine cards being on the table or otherwise indifferent	4, 5, 5, 6	1	2
	4, 4, 6, 8	1	4
	4, 4, 6, 6	2	4
	4, 5, 6, 7	2	6
	4, 4, 5, 6	2	6
	4, 4, 4, 6	2	7
	1, 2, 2, 2	2	7
	4, 4, 7, 8	2	8
	4, 4, 4, 5	3	11
The other six cards being on the table or otherwise indifferent	4, 4, 5, 6, 7, 7, 7	2	3
	3, 3, 4, 4, 5, 5, 6	2	5
	3, 3, 4, 4, 5, 6, 6	2	7
	1, 1, 4, 5, 6, 6, 6	3	7
	4, 4, 5, 5, 5, 6, 7	3	7
	2, 3, 4, 5, 6, 7, 8	3	9
	3, 3, 4, 5, 6, 7, 8	3	9
	4, 4, 4, 4, 5, 5, 6	3	9
	4, 4, 4, 5, 6, 6, 7	3	9
	4, 4, 4, 6, 8, 8, 8	3	11
	3, 4, 4, 4, 5, 5, 5	4	9
	2, 3, 4, 4, 5, 5, 5	4	13
	3, 4, 4, 4, 4, 5, 5	4	13
	4, 4, 4, 5, 6, 6, 6	5	13
	2, 3, 4, 5, 6, 6, 6	5	17

CHAPTER VI

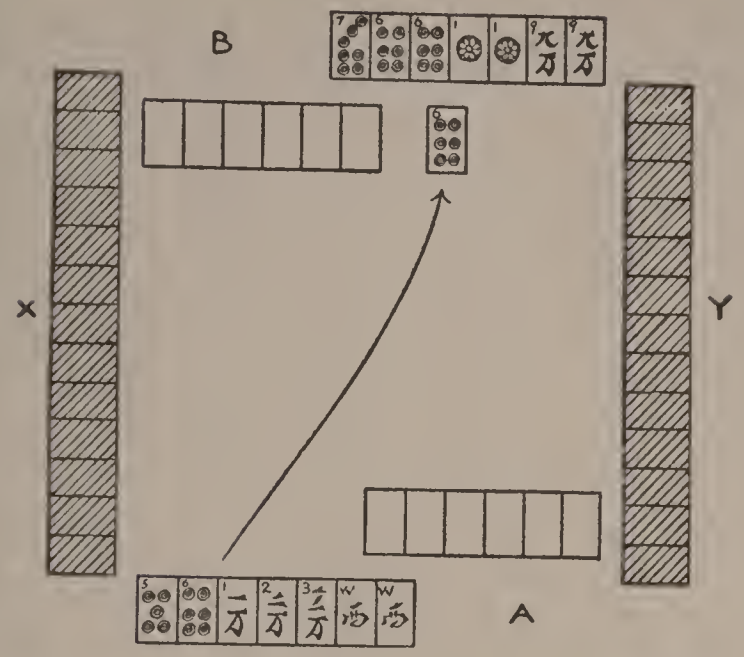
Miscellaneous Problems and Fine Points

Two Processes of Interchange of Cards. Oftentimes, and towards the latter part of the game, two players are seen firing cards to each other: first, A discards a card which B takes; and B, as if acknowledging a favor, greets A with a more polite courtesy by discarding a card which completes A's hand. Such a process, for want of a better term, I shall call an "interchange of cards."

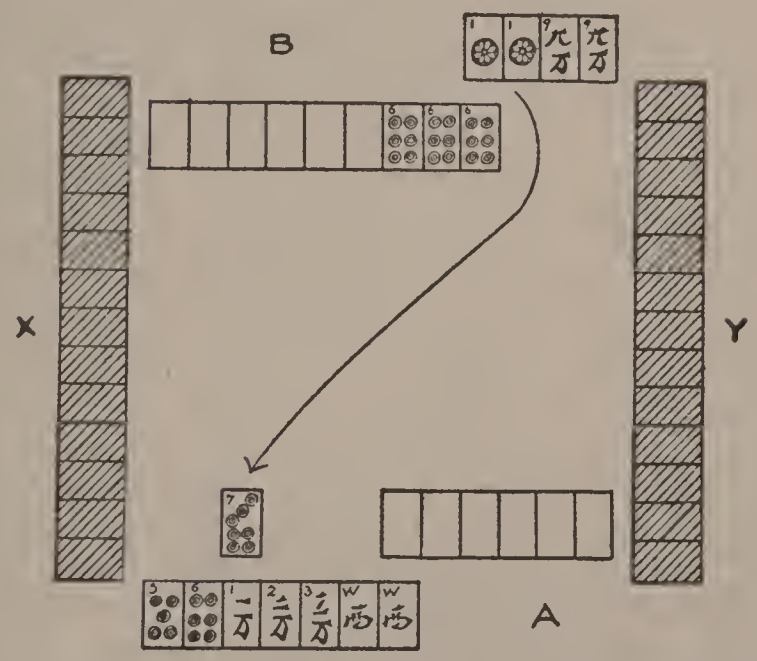
There are two definite processes of this kind. They are closely allied in respect to their operations and effects, for in each case the process involves an interchange of cards between two players; and in each case the result is that the first discarder receives the benefit. They differ in that, in one case, the first discarder is unconscious of the process or the effect of his discarded card; in the other case, the process involves a conspicuous manœuver on the part of the first discarder.



A, having drawn the 1 character, will have a calling hand as soon as he discards a card from the group 5, 6, 6 circles. He chooses a 6 circle.



B pungs the 6 circle. By doing so, he finds the 7 circle useless and naturally discards it.

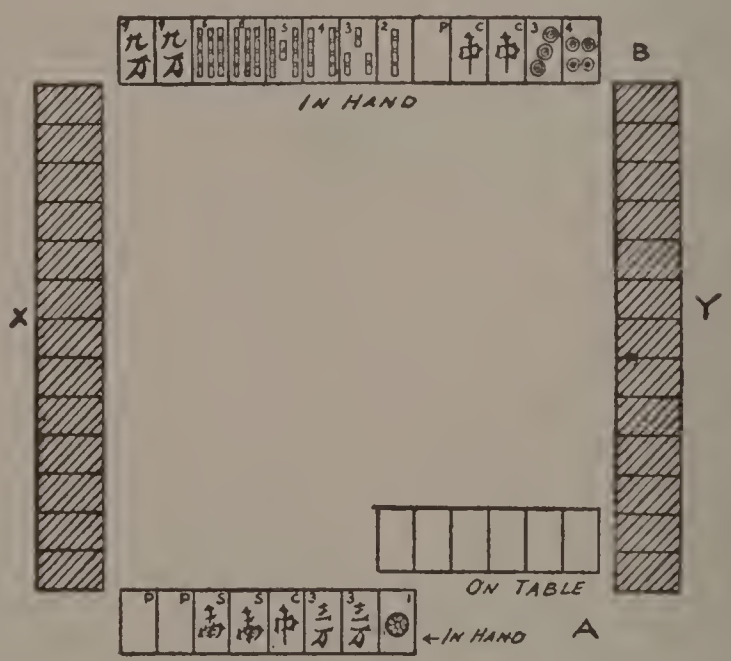


Very often B's discard completes A's hand. In this case, the 7 circle does.

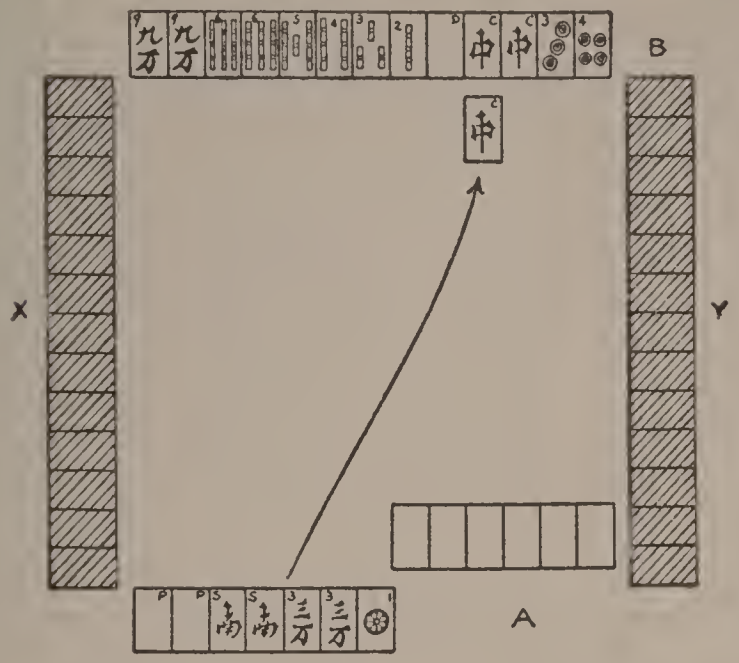
NOTE—In this process the interchange of cards applies to cards of "Numbers" suit.

In the first case, if A discards a card from one of his groups, then he will have a calling hand. B finds that he has need of A's discard either by punging or chowing; and by so doing he also finds that a "neighborhood" card of the group is rendered useless. This odd card is B's natural choice of discard, which very often fits in A's hand. The preceding diagrams will make this clear.

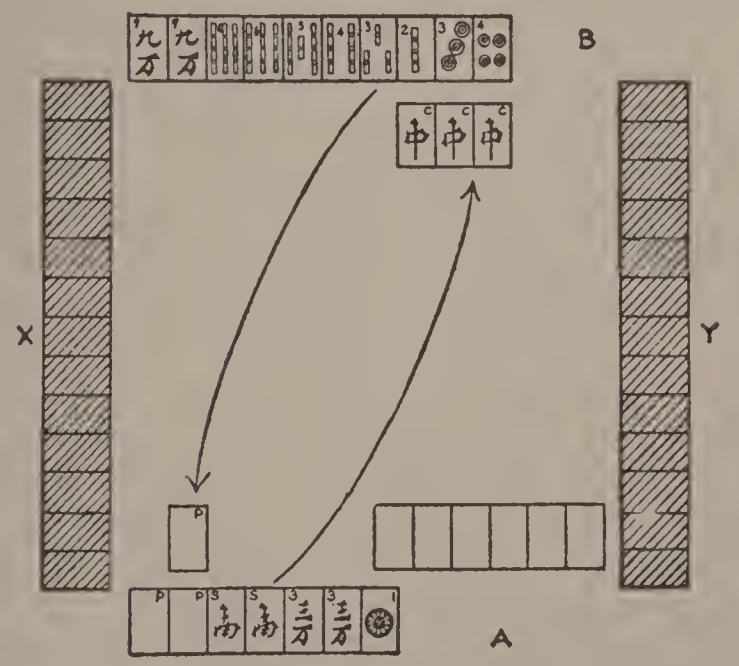
In the second case, A has several pairs of honors. The game is already well under way; yet not a cannon has been fired. He concludes that, if he sacrificed an odd honor and if somebody happened to pung it, this latter person would be tempted to give up his odd honor also. A therefore discards a red honor and sure enough B pungs it. Having done this, B finds his hand near completion, and he discards his useless odd white honor. In this case, the white honor does not invariably complete A's hand; most likely, A would then be calling.



A concludes that his only way of punging to one of his honor pairs (a pair of white honors and a pair of his own winds, South) is to throw away the red honor.



Having punged the Red Honor, B finds that he has no use for his White Honor.



A pungs the White Honor. He now has a calling hand; often he discards the 1 circle.

NOTE—In this process the interchange of cards applies to honors and winds.

Why Four of a Kind is Not Always Claimed. If a three of a kind is on the table and the fourth card is drawn, this card is added to the first three to make a kong.

This four of a kind should not be claimed in these two very exceptional cases: (1) When the situation makes it manifest that some unusually large hand is near completion. This is to prevent the caller from "robbing your kong," which would entitle him to an additional double. (2) If you have reason to believe that some one player is calling your card. For instance, if at the time you punged a card, you noticed that this player also wanted to chow it, then you should not claim your four of a kind.

Some American writers think it fine strategy to pung the fourth to three of a kind but to expose only three, retaining the fourth until calling when the lucky shot, "winning on the roof," is expected. I refute the validity of this play. My first objection is that there is just as much chance for somebody to "rob your kong" as there is for you to get the lucky shot. But more vital is the following consideration. The rule that one can fill the four of a kind only after any of his draws from the wall *and not after claiming a discard* limits the execution of this strategy to such a narrow point that its purpose is almost wholly defeated. Remember, too, that if some player woos before you claim the four of a kind, a large part of your score is forfeited. The futility of this play is made more apparent when the chance of success is considered.[1]

Playing for Safety. If, in the course of play, your hand is still as poorly organized as it was at the start, and if at the same time you know or believe that some one is building up a high-scoring hand, your best policy is to favor the other two players to win, or, if possible, to favor the player with the smallest score. It is bad policy to run the risk of losing 300 points for the infini-

[1] Perhaps the only case in which the play is justified is where there is a possibility of drawing the 5 circle from a loose tile — Getting a Plum Blossom — which scores the limit. See p. 21.

tesimal chance of winning 60 points. So obvious is this principle that it is hardly worth mentioning. But how often in actual practice people ignore it!

The correct way to play is to stop the progress of the player contemplating a large hand and to discard so that the player with a small score may woo. If the latter is calling, discard some "neighborhoods" of the card which he just discarded. Should he discard a 2 bamboo, try a 1 or 4 bamboo, and then a 3 or 6 bamboo, but not a 5 bamboo. Should he discard a 7 circle, try 5, 6, 8 or 9 circle, then 3 circle, but not 4 circle.

Towards the end of play, one may try for a drawn game. You should fire no cannons and new cards under any circumstances. Study the cards on the table and the discards of the players and be guided accordingly; and, if necessary, break up your pairs and threes of a kind.

Winning on Comparing Scores. A player may not woo and still be able to make substantial gain. If the close of the game is near at hand and from the evidences of the situation it is impossible for you to woo, then it is better to give up the project of completing the hand. Play some new cards and let some one win, while you make your gains from the other two players.

Outguessing the Left-hand Person. The person on the left constantly applies the checking method against you. To induce him to discard a card which will suit you, some sort of artifice must be employed. You hold a group of 5, 6, 8, 9 characters; you are having two possibilities to make a straight. The 8–9 characters is "protected" by the 5–6 characters and does not mean much to you. By discarding first the 9 character and then the 8 character, it makes it appear that the 7 character is of no use to you. When the person on the left plays his 7 character, you have a trap already prepared. Again, you have 1–3 circles which you prefer breaking up rather than to break up a like combination. After discarding the 1 circle, you draw another 1 circle back; this time you may well retain it and break the other combination. If

the person on the left plays a 2 circle against you, he is again deceived. Should you draw a 2 circle back, so much the better; for he thinks that "it is a cinch" that you cannot chow his 1 circle.

Conspicuousness, a Failing Factor. One of the secrets of the expert is his ability to hide the real character of his cards. *He exposes cards on the table only when the exposure is absolutely necessary to the completion of his hand,* thus making the hand as harmless as possible in appearance; and for any one to disclose any inside facts is extremely difficult, since he is so clever in concealing information. The average player, on the other hand, plays an altogether too conspicuous game. Very often to come out ahead or behind depends on the success or failure of the completion of a few high-scoring hands. Conspicuousness would mean failure.

To illustrate what I have said, I will point out an extreme case. You are holding the following hand:

If some one discards a red honor, it is better not to claim the four of a kind, since by so doing attention will at once be drawn to your hand. Your aim is to woo rather than to compare scores. Were the three red honors already exposed on the table, the more reason there would be not to claim the fourth green honor, for then you would be placing a blockade[1] on your own hand.

The Chinese military book says, "What is unsubstantial in appearance may be substantial in fact; what is substantial in appearance may be unsubstantial in fact." We should profit by this saying.

While Calling. While you are calling, it is best not to change your cards, unless you can increase the number of chances. This applies more especially to a hand of only 4 cards, for the simple reason that people take for

[1]See penalty rules, case (4), p. 26.

granted that you are calling. For instance, you are holding a calling hand like this: 2, 3, 4, 5 bamboos. The number of chances is six. Should you draw a 6 bamboo and discard the 2 bamboo, the number also remains six; but by doing this, you are giving people some inkling as to what probable cards you need. Therefore, discard the 6 bamboo as soon as you draw it. But if you can increase the number of chances, the case is different. For instance, the number of chances in a hand like this, a pair of 1 circles and 2–4 characters, is four. If you draw a 5 character, you should discard the 2 character, thereby increasing the number of chances to eight.

It is possible sometimes to mislead people by the following play: Suppose you are calling the character suit. You now draw a circle. Place this circle among your other cards, pretend to hesitate which card to throw out, and finally discard the circle.

How to Fish the Single Eye. That fishing the single eye is a bad policy has been explained before. If it *can* be avoided, it should *always* be avoided.

There are two classes of cards that are easier to fish than others. The first class is composed of those cards that people will generally discard. It consists of winds and end tiles, as well as honors. The second class includes those cards whose connections with other cards have been cut off. For instance, if three 5 bamboos and three 7 bamboos have been exposed on the table, either through punging or discarding, the connections of the 6 bamboo with other bamboos have been greatly lessened.

In fishing the single eye, the stage of the course of the game has also to be taken into account. Earlier in the game, one can fish a card which has been discarded once, for players like to follow old cards. Later in the game, one should fish a new card; this is done partly to prevent somebody from completing his hand.

Sometimes three or four players in the game do not take proper care in shuffling the cards well. They build their walls as a matter of course. The result is that similar

cards are put together in adjoining places. In playing with such a group, advantage should be taken of this fact when fishing the single eye by changing every card one draws.

Above all, always fish the card that you are sure to get. For instance, you know that A is breaking up the combination 1–2 bamboos. You know it because, when he discarded the 1 bamboo, he also at the same time removed one other card to the right-hand corner, ready to be discarded in his subsequent turn. Then if you should draw a 2 bamboo (or 3 bamboo), keep it and lie in wait. Or again, you know that A is already calling, and suddenly C discards a card, which A pungs with his pair of eyes and throws out an 8 character. Then you should know that he is fishing the 9 character; it could not be the 7 character, or else he would not have punged his pair of eyes. If you should draw a 9 character, keep it and lie in wait; for as soon as A draws a more favorable card, he will discard his 9 character.

Mental Calculation. In building up an all-one-suit hand, where the average player falls most short is in his slowness in finding out all the possibilities of the hand. As a result, he arranges his cards this way and that way, and thus leaves no doubt as to the true character of his hand. One must learn to decide by the mind, without the help of the hands, when it is necessary to pung and to chow, and which card to discard, and, while calling, what are the possibilities. He must learn to play this hand as naturally as when playing a usual hand, so that not a trace of suspicion can be excited. It is strongly urged that every player should in his leisure hours arrange various hands of the sort, and learn to decide on these things quickly and naturally.

CHAPTER VII

Luck: Its Phenomena

Superstition and Luck. Superstition is an attendant of ignorance. Primitive men attribute any phenomenon unsusceptible of explanation to a mythical super-being. The range of phenomena is so wide that superstition opens a world of its own and presents us with scenes, beings, and objects which are altogether new. Superstition works strongly on the mind as it arises naturally from the popular opinions of mankind.

There are in many superstitions some unrecognized truth. "Note the superstitions associated with the cure of disease. . . . The explanation of the process, the potent influence of the subconscious mind, was, of course, not known but the fact was there, nevertheless. No one suspected the existence of such a thing as autosuggestion; so the benefit derived therefrom was logically ascribed to the supernatural. . . ."[1]

Is there such a thing as luck? I must answer in the affirmative. Scientific explanation for its existence is not available; experience alone convinces me. Experience shows that luck is a fact just as the winds and the tides are; it shows that luck runs in cycles and that it goes to certain persons oftener than to others. If any one thinks that belief in luck is a superstition, let him know that there is a kind of superstition in which there is a " modicum of fact."

Nature of Luck. Luck is of such nature that when it is rightly made use of, it will work wonders; but when wrongly made use of, it will result in disaster. One way of defining an expert player is, therefore, "one who

[1]Charles Platt, The Psychology of Social Life, p. 167.

knows how to play according to his luck." Luck is not only true of Mah Jong, but also of any game in which the element of "chance" exists. In fact, Mah Jong is not the best game in which luck is applied most effectively; and so far as I know, poker affords a better advantage for its right application. In the latter, there are both the absolute and the mechanical means of evading bad luck, while in the former, there are only the mechanical ones. When probing deeply into the nature of luck, we find that it possesses certain characteristics.

The Luck Cycle. Experience shows that luck runs in a certain noticeable course — in periods. A period of good luck declines and is followed by a period of bad luck and *vice versa.* It is not unlike the business cycle; for in business activity, the cycle has its stages of depression and of prosperity; depressions pave the way for revivals, revivals develop into "booms," "booms" breed crises, and crises run out into depressions.

The manifestation of the period of good luck need scarcely be mentioned. It is designated by a series of wonderful hands, honors and own winds forming in pairs and in triplets. You woo frequently and, when you do not woo, you make a great deal of gain simply by comparing scores. The cards seem to run so naturally that each one drawn in is useful. You may have a poor hand to start with and others may be calling from the very beginning; but eventually you overtake them. You may have only one possibility to complete the hand and the others may have two or three; but mathematical probability does not tell the true story in this case. When you are calling the same card as one of your adversaries, you are always in such a position as to hold the precedence.

The period of bad luck is just the opposite. You can scarcely improve your hand as the game proceeds; and more scarcely still can you hold an excellent hand. Once in a while when you do hold a wonderful hand, it is apt to be overshadowed by the fact that somebody's hand is more wonderful than yours. Under such circumstances,

you are bound to lose on your strong hand, for, having a strong hand in your possession, you do not care to break it up, and you begin to let off the cannons that are left and are useless to the completion of your hand. So the person holding that more wonderful hand has his cards completed, displaying all the majesty of a full house.

Luck as Depending on Individuals. There are two classes of persons who have unusually good luck.

One class is the beginners. The phrase "beginner's luck" is often heard of nowadays; perhaps its truth is also believed by many, and rightly so. It seems as if Fortune, seeing that beginners are likely to be preyed upon by the more experienced, purposely compensates them with better luck. Thus equipped with a strong weapon, the beginners will usually win at their first sittings; and, flushed with victory, they will become more eager and enthusiastic about the game.

To the second class belong those *who always have good luck.* They need not necessarily be beginners; they may have played the game for years, but still have luck because they are born with it, so to speak. Their luck is phenomenal and almost beyond belief. The luck cycle does not seem to apply to them; their luck continues day after day, comes to a brief close only after a long duration, and commences anew the next day.

Facts Substantiating the Luck Phenomena. To those who think it absurd to believe in luck, let me say that the player who is disinclined to believe in luck is the easiest man to beat. Gambling is like any successful business; go to the limit under favorable conditions and lessen the risks during adverse periods.

Let me point out how poker players lose their money; I mean to say, how they lose when playing among honest players, for there is no earthly chance for any one if he fights against card-sharpers. Here is a man who employs a conservative style of play under ordinary or favorable conditions. At times when he has no luck, he loses; and if now he can play a more conservative style, he will not

lose any heavy amount at the end. Being disinclined to believe in luck or being ignorant of it, he wants to recover the little amount of loss. He leads in building big pots and he never takes one. If he has a fairly strong hand he raises his opponent; his opponent, being an expert, overlaps his first raise very slightly, in the hope of getting a second one. He thinks this a good chance to recover all his losses and gives a second raise, on obtaining which the expert bets heavily. And so, the more he loses, the more reckless becomes his betting; or, perhaps we should say, the more reckless becomes his betting, the more he loses. He shows temper, but temper and luck simply cannot co-exist.

Some critics argue that luck is a false faith instilled by professionals in a number of victims who thus hold the belief that they are born lucky; in this way, they say, an enormous fortune might be made from them. But, in reality, luck is a sound doctrine, and only experience can show its existence. All professionals have some notions of luck because they have been convinced through experience. Certainly they would not reveal their doctrine to others; rather would they conceal it as far as possible. Whatever these critics or masters of probability may say, whether they term the luck theory another form of the "gambler's fallacy"[1] or a false faith for the exploitation of victims, yet I think I have not taken a wrong step in explaining the luck phenomena.

What Some Well-known Writers on Probabilities Have to Say

Laplace — "In a long series of events of the same kind the single chances of hazard ought sometimes to

[1]The gamblers believe it extremely difficult to throw a number of the die several times in succession. If a die is thrown and the number "4" turns up, even though the chances are 1 to 6 that the next throw will produce a "4," such gamblers are willing to bet something more than the usual odds against it. This is sometimes called the "gambler's fallacy."

offer the singular veins of good or bad luck which the majority of players do not fail to attribute to a kind of fatality. It happens often in games which depend at the same time upon hazard and upon the competency of the players, that that one who loses, troubled by his loss, seeks to repair it by hazardous throws which he would shun in another situation; thus he aggravates his own ill luck and prolongs its duration. It is then that prudence becomes necessary, and that it is of importance to convince oneself that the moral disadvantage attached to unfavorable chances is increased by the ill luck itself."[1]

William Rouse — "There is another inestimable gem, of nearly equal value in the production of riches, which is desired by all, sought after by many, and has *been actually found* by more persons than there are saints in the Roman, or gods in the heathen, calendar; that is, LUCK. It is true, a set of needy fellows, called mathematicians, laugh at it; but, laughter is not logic; and they are as likely to be actuated by envy, as any other set of beings: and, as the fox did with the grapes, speak ill of what he could not obtain. . . ."[2]

[1]Marquis de Laplace, A Philosophical Essay on Probabilities, translated by Truescott and Emory, p. 164.

[2]William Rouse, Doctrine of Chances, Preface, p. 4.

CHAPTER VIII

Application of Luck

In the last chapter, we have discussed the phenomena of luck. We have seen how luck runs in cycles; we have furthermore noticed how certain individuals have better luck than others. The question now arises: If such were luck, what could you do with it? The answer is, we play a different game during the different periods of the luck cycle. This is what I call "utilizing the period of good luck to the greatest extent and minimizing the losses in a period of ill luck."

Blackbridge's Opinion. John Blackbridge, in his "Complete Poker Player," devotes a chapter to the advantage of the small-limit game in draw poker. In this chapter he incidentally refers to the subject of luck. So valuable is his criticism that it is thought advisable to publish it in full.

"Baron Rothschild's maxim is in this connection a golden one for Poker-players — 'Cut short your losses; let your profits run on.' In other words, do not back bad luck at all, and let good luck have a large swing. When you are in bad luck you are on the high road to poverty, although you may be at a great distance from it, but still you are on a road which you cannot afford to travel; therefore *don't travel it any faster than you are obliged to*, and remember, when you are in ill luck, you are apt to lose on strong hands."[1]

Utilizing the Period of Good Luck to the Greatest Extent. We will be more optimistic and begin with the period of good luck. In this period it is advisable to attempt to

[1]Blackbridge's Complete Poker Player, p. 25.

build up strong hands, as far as possible. Evidently, it is several times more difficult to complete a strong hand than an ordinary hand. But when you are in luck, the cards will come all the way to suit you. You get whatever you desire. Try to go for those high-scoring hands, such as all-one-suit hand, the "Three Great Scholars," etc., if the least chance affords. Luck knows no odds; if good luck is not utilized to its utmost, the most opportune moment will be lost. To take a concrete instance, your hand consists entirely of characters except a straight of bamboos. Now if you know that you are in luck, the best policy is to break up this straight. To your great surprise, you will find that almost every draw will bring in a character to replace a bamboo. Soon you will find that your hand will consist of all characters, the completion of which will give you three doubles.

Another point to remember is to chow less often than usual but to make as many draws as possible. Do not be tempted when you have a chance to make a straight, but draw your card, for you may be sure that anything you draw will be useful. Chowing a discard involves a shifting of cards: your cards are shifted to the right-hand person. And here is the most interesting point. The shifting of your cards to the right-hand person would sometimes mean the shifting of your luck to him. Through your eager desire to chow a card, your luck declines, while his thrives. Therefore, by all means, do not chow more than it is absolutely necessary. When the combination is both-ended, and when the game is at its beginning, this point is especially important.

Generally speaking, it is good policy to keep the odd honors and your own wind while in luck, so that you can increase your score. There are, however, cases in which this is not desirable. The chance to complete a hand consisting at the start of more than two different honors and two or more different winds is rare. To discard the honors and the winds and to keep the "numbers" suits is known as "playing long"; to discard the latter and to keep the

former is known as "playing short." The two methods of playing must fit the occasion. In luck and with a hand such as just described, you should "play long" so as to enable you to woo. Without luck you cannot woo no matter what method you use. You should "play short," for while you do not expect to win, you do expect to prevent others from scoring a large hand.

Taking chances means doing something without due regard to the connection between cause and effect; it means assuming risks without sufficient odds. It is, therefore, bad policy to take chances in any game. For instance, suppose the end of the game is approaching, and if you will let off a cannon in your hand, you will have a calling hand. Taking such a chance is bad policy, since the odds are overwhelmingly against you. One is, however, justified in taking a risk in the following cases: (1) If he himself holds a high-scoring hand; but then it will no longer be taking a chance, for the odds guarantee the action. (2) If he is in the period of good luck. The calculation of odds can be for the moment ignored, for luck is an unfailing factor.

How to Lose the Minimum in a State of Ill Luck. "When you are in bad luck, you are on the high road to poverty. . . . Therefore don't travel it any faster than you are obliged to." After a few hands have been played off, you ought to be able to tell whether you are in luck or not. I shall mention the following cases, just to show you some of the symptoms of ill luck. You have been calling from the very beginning, and logically you ought to win your hand, but the result proves to be the contrary. You are calling on a one-sided combination (*i.e.*, 1–2 circles, calling the 3 circle), and some one draws a 3 circle to form a hidden four of a kind. You are calling on a both-ended combination, and some one happens to be in position to take the precedence to win over you on a middle combination. When these and other symptoms of ill luck occur, it is time for you to be very cautious. Safety first is the best policy to follow, until your luck changes.

When bad luck comes, your policy should be just the opposite of what you should do in the period of good luck; let a conservative policy, defensive game, dominate your play. Instead of attempting to build up strong hands, you should be satisfied with small ones and try to complete them as quickly as possible. Do not say, as many would, after losing a thousand points: "How could I come back when my hands are worth from 12 to 14 points each time?" The fact is, instead of paying a heavy loss, you are making from 48 to 56 points each time. Here the element of patience comes in. A person who, while in ill luck, can patiently await his more fortunate time, is the hardest person to beat. The statement is positively true in all games. It explains why in such a game as poker, a conservative player always beats a reckless one. To a conservative player, bluffing is an erratic procedure; time is his favor.

Changing of Luck — Mechanical Means. To be willing to win on small hands, or in other words, to have patience, is probably the most important thing to bear in mind when in ill luck. This method is what I call the "positive" method of evading bad luck. It has the principle of the "stay out" method in poker; as every poker-expert knows, money is not lost by staying out but by actual playing; so this "stay out" method is the most effective method ever developed by a patient player in the game of poker. But in Mah Jong, no one can stay out; and so there can be no "absolute" method of evading bad luck, in the poker sense.

A number of mechanical or artificial methods for the changing of ill luck have been advanced by Chinese experts. Before further analyzing these methods, one might ask: How could luck ever be changed from its natural course? We shall get our answer from the experienced poker-players. If a player can adhere to the "stay out" method, he can have no fear of losing any considerable amount; that is, what he loses is the small amount of antes chipped in each deal. Simple enough; yet, in actual

practice, certain difficulties present themselves. In the first place, there is a limit to everybody's patience. No one can have the patience to sit two or three hours without once in a while entering a pot. In the second place, sportsmanship demands that a gentleman shall not stay out too long. What, for instance, would you think of a gentleman who in stud comes in only with a pair back to back, or in draw only with two big pairs and up? Such a gentleman will soon find that his presence is shunned by all. Therefore, even in poker, the absolute method can be used only to a certain degree. The experts have discovered that, if one can successfully bluff several times or if one can outguess or outplay his opponents decisively, his luck will gradually change. Such means are what I term mechanical means.

So, to return to Mah Jong, we have the following mechanical means for the changing of ill luck.

(1) *Checking the seeds to prosperity.* When a player woos very frequently, or when he prevents somebody from completing a strong hand, either by holding his calling card accidentally or by wooing before him, luck is gradually becoming his. This is a critical moment, for seeds to prosperity are germinating. Necessary steps must at once be taken to terminate this ascendency of luck.

The method is, should you have his wind, hold it firm to the end, even to the extent that by discarding this single wind of his, you will be calling. Also hold all the honors. The reason for so doing is that frequently a person in luck already gets a pair or pairs of such cards from the original deal, usually a pair of his own winds. Should he sit below you, use the checking method; should he sit above or opposite you, follow all his discards. After he has experienced this harsh ordeal two or three times, you may be reasonably sure that the root of his luck is destroyed, and that further luck is coming into your favor.

(2) *Shifting the good luck of an opponent to yourself.*

The method consists of the shifting of the cards of an opponent to you. Sometimes, such shifting would mean the shifting of his luck to you.

A. *If the right-hand person is in luck.* Should your *left*-hand person discard a card which under ordinary circumstances you would chow, do not take it; for this process involves a shifting of cards, *i.e.*, the cards of the right-hand person are shifted to you.

B. *If the left-hand person is in luck.* Under ordinary circumstances, nobody ever takes a card from his left-hand person to his already completed straight. For instance, if you already have in your hand a straight made up of 4, 5, 6 circles, you would never chow a 3 circle and discard your 6 circle; for then you would waste a chance for improving your cards. But when the circumstances are such that your left-hand person is in luck while you are not, then sacrifice your chance of the draw and chow his 3 circle. This process involves a shifting of cards, *i.e.*, the cards of the left-hand person are shifted to you.

C. *If the opposite person is in luck*, pung his discard which under ordinary circumstances you would not pung. For instance, if you have 6, 7, 7, 8, 9 circles, the best play generally is to let 7, 8, 9 circles stay as one straight and wait for either a 5 or an 8 circle to complete another straight. But when luck is such as above described, pung the 7 circle should your opposite person discard one. This process involves a shifting of cards; his good cards are shifted to you while your bad ones go to him.

CHAPTER IX

Some Speculative and Experimental Calculations

Some Basic Computations. The following computations are necessary in formulating some of my theoretical problems.

First, let us find out the number of cards that are used in play. There are in all 136 cards. Each person takes 13 in the deal,[1] making a total number of 52. Dead or undrawn cards number 14. Therefore, $136-(52+14)$ is the number of cards used in play; the result is 70.

The number of draws by each person in a game, assuming that an equal number be drawn by each one,[2] is $70 \div 4$ or 17.5.

But in actual play, the game is not always ended with last card drawn. Sometimes a person completes his hand at the very beginning; sometimes no one ever wins after the last card is drawn. Many factors enter into consideration here; among which is that there are more drawn games when four experienced players play together than when four beginners are engaged in the game. By observing actual games a number of times, I have come to the conviction that the average game ends with 17 rows (not including the dead cards) left undrawn.[3] Therefore, the number of draws by each person in an actual game averages approximately $(70 - 34) \div 4$, which equals 9.

The Average Original Hand Calculated Experimentally. To find out the average original hand obtained from the deal mathematically would be an extremely difficult task; the process would necessitate an intricate system of

[1]East Wind takes 14, but that is because he starts the play first.

[2]When a player chows, he does not draw. When a player pungs, he does not draw, and one or two players may lose their turns to draw. Consequently, the players do not all draw the same number of cards.

[3]This conclusion is reached after observing 60 rounds of play.

formulæ. I have therefore chosen to do the task experimentally. First, I made an arbitrary classification of different types of hands, as follows:

(1) A hand consisting of 8 cards of the same "numbers" suit, and 5 indifferent cards.

(2) A hand consisting of 9 cards of the same "numbers" suit, and 4 indifferent cards.

(3) A hand of 8 odd heads and ends.

(4) A hand of 9 odd heads and ends.

(5) A hand consisting of one pair of honors or own winds, the rest being either (*a*) well organized or (*b*) poorly connected.

(6) A hand consisting of two pairs of honors or own winds, or a set of three honors or own winds.

(7) A hand consisting of more than two pairs of honors.

(8) A hand consisting of (*a*) four or more pairs or threes of anything except honors and winds. (*b*) Three pairs and a pair of honors and own winds.

(9) A calling hand.

(10) A hand having none of the above features, but well organized. That is, as soon as one or two improvements are made, the hand is ready to call.

(11) Same as (10) but only fairly well organized. That is, the hand usually has 3 or 4 odd cards, one or two pairs, both-ended and middle combinations, one or two straights; etc.

(12) Same as (10) but poorly organized. The hand usually has more than 4 odd cards, and most of the combinations are middle or one-sided.

(13) A very poor hand, still worse than (12).

Then, with the help of some of my friends, 2,000 hands were dealt in the regular manner, as if we were actually playing. Each hand was opened, examined, and assigned to one of the types.

The mode which occurs with the greatest frequency was found to be of type (11). Type (11) came first with 705, closely followed by type (12) with 648; while type (9)

with the quantity zero in its favor ranked lowest. All the results are shown in the following table:

Type	*Name*	*Total Number*	*%*
1	Eight cards of the same suit	44	2.2
2	Nine cards of the same suit	5	.25
3	Eight odd heads and ends	19	.95
4	Nine odd heads and ends	4	.2
5	One pair of honors[1]		
5	(*a*) The rest well organized 174		
	(*b*) The rest poorly organized 167	341	17.05
6	Two pairs of honors or a three of honors	68	3.4
7	Better than two pairs of honors	9	.45
8	(*a*) Four or more pairs 14		
	(*b*) One of the pairs being honors 4	18	.9
9	Calling hand	...	.....
10	Ordinary hand, well organized	79	3.95
11	Fair ordinary hand	705	35.25
12	Poor ordinary hand	648	32.4
13	Very poor ordinary hand	60	3

To Determine the Relative Advantage and Disadvantage of Retaining an Honor in Favor of Some Other Tile. In giving preference to an honor by retaining it and discarding some other tile, there is a chance of your score being doubled; however, this is done through sacrificing the speed of completing the hand. How, then, are we going to determine the relative advantage and disadvantage of so retaining an honor?

One determining factor is luck. As we have said before, we must play our honors according to good or ill luck, for luck defies all mathematical reasonings.

Assuming equality of luck, what would then become the probable advantage or disadvantage? The comparison is between speed and the score being doubled. Now, it is a known fact that end tiles cannot help in speeding up the hand to any great extent; and so the comparison would narrow down to a choice between an honor and a

[1]In this table, "honor" is used to include honors and own winds.

middle tile. Let us suppose that you are holding a red honor at the start. What is the probability of your drawing a second red honor if you are to retain it to the end? And having retained your red honor, what is the probability of obtaining the all-important one by punging or drawing?

In the 136 cards there are four red honors, of which one is in your hand of 13, leaving three in the remaining 123. This means that out of every 41 cards there should be one red honor, although it is quite possible that all three may be in the dead rows; or they may be in one of the players' hand; or again two of them may be in the tiles for drawing and one in the dead rows; or other similar possibilities. Now the number of cards held by your opponents being 39, the probability of their holding a red honor is 39/41 or 1; dead tiles being 14, the probability is 1/3; this leaves 1 2/3 red honors in the cards for drawing. Since four players are in the game, the probability of your drawing a red honor is 1/4 of 1 2/3 or 5/12. That is to say, your chance of drawing an honor to match your first honor is less than once in two hands. And yet this calculation assumes that the game invariably ends with the last card drawn, which is not true in actual play; hence even the most liberal estimate would place your chance at less than 1/3.

The next question is, what is the probability of getting the third honor? At this point, mathematical calculation is almost impossible. Having one pair, you are now dependent on the other three players to discard the third honor, unless you are fortunate enough to draw it yourself. The general rule is, the earlier you obtain your pair, the more chance you have to pung it.

Let us next see how a middle tile, say a 4 circle, aids speed. Five cards will turn this single 4 circle into useful combinations, namely, 2, 3, 4, 5, 6 circles.

The conclusion is now clear. Speed should not be sacrificed on account of the scant chance to double the score.

Exceptions to the Above Rule. If you had one double or the possibility of having one double in your hand it would be worth while to retain an honor for a second double. A second double doubles the total score already doubled; a third double doubles the product again. If the original score is 20 points, one double will make it 40 — an extra of 20 points; but a second double will give you an extra of 60 points, not 40; and a third double will make the total score 160 instead of 80.

With a very large score, say that resulting from 4 of 9 characters concealed, it would also be worth while to retain an honor for the same reason.

To Determine the Least Number of Cards of the Same "Numbers" Suit on the Original Hand Before Trying for an All-One-Suit Hand. Without considering the element of luck, let us proceed with the problem.

Many players estimate the number at 7, but I think in the long run it does not pay to try with this small number; a paying proposition would require 8 cards to begin with.

Two questions must be considered. To what extent can we rely on completing the hand on our own draws? And to what extent can we rely on chowing and punging the discards of the other three players?

We will suppose that you are trying for a hand of all bamboos. The number of bamboos is 36 against 98 non-bamboos; the ratio is 1 to 2.72; but the fact that you are working for an all-bamboos means a predominance of that suit in your hand and lessens its number outside; and so the more approximate ratio would be 1 to 3. Out of every four draws then, you should obtain one bamboo. Referring to the basic computations, each player draws nine times in an average game; this makes the number of your drawn bamboos at 2.25.

The most that you can depend on chowing and punging is two bamboos, and no more. With 9 cards of the same suit on the table, no one is allowed to discard any more of that suit; it is bad policy to call on a hand under such restrictions unless there is no alternative.

To begin with 7 bamboos would mean that by the time when some player has won the game, your hand would consist of 11.25 bamboos. You would be too late. To begin with 8 bamboos would mean a hand of 12.25. This is better. There is hope if the game lasts longer than usual, and if by chance you have drawn more than your share.

Fallacy of Consistent Playing for High-scoring Hands. We often meet Mah Jong players who hold the opinion that consistent playing for high-scoring hands is the only sound way of playing the game. They base their argument on the theory that it takes a great many hands scoring 12 to 20 points to offset a hand scoring 200 points or over. If out of ten games the person playing for a low-scoring hand averaging 16 points each completes his hand nine times, and the person playing for a high-scoring hand completes but once, the latter wins. All this sounds very well, but in practice it is generally the persons who hold this idea who come out with a minus score; and if the cause of failure is asked, they blame their luck. This is inevitable because the human mind habitually leads one to overestimate one's own skill and underestimate that of one's opponents, to underrate one's own luck and overrate that of the others.

In this case, faulty calculation of probabilities rather than luck is to be blamed. The average hand lies somewhere between types (11) and (12), *i.e.*, a hand more or less unorganized with its suits all mixed up and without pairs or honors. To expect to build up a strong hand with such cards from nine draws, which is the average, is absurd.

The reader may be inclined to think that I am an advocate of playing for fast and small hands, but this is not true. Good original hands are rare; and if such hands do occur, every opportunity should be seized to develop them into high-scoring hands. Mention here must be made that the policy of playing each hand must be planned from the start, because of the limited number of draws

to modify a hand to any great measure, although it should be observed that one's original plan of campaign is often altered owing to the opponents' discards and other conditions.

The Improvement by the Draws of the Strong and Weak Hands is in Inverse Ratio. The chief factor that accounts for the development of the hand is the draw. However, the draw does not improve every hand in an equal ratio. A hand which is already well organized cannot receive as much benefit from the draw as a poor hand. In other words, the draw improves the strong hand and the weak hand, in inverse ratio to the strength and the weakness. Be this as it may, one must not be led to conclude that there would be no difference of value between original hands; for the draw can never set off the advantage of the initial momentum.

From the above principle is evolved the rule that a player should not be too eager to chow early in the game, especially when the combination is both-ended. At this stage of the game, when there is lots of room for improvement, the draw would usually help the hand far better.

Skill versus Chance. What is the relation between skill and chance in the game of Mah Jong? I shall attempt to discuss it but not to solve it; and I propose to submit this question for the solution of mathematicians.

In a game of pure skill, such as chess or checkers, a player with a superior reasoning power, no matter how small the margin of superiority, always beats his opponent. It is only when he is not in form, when his brain is worn out with fatigue, that the superior player is beaten by the inferior. At the other extreme of the scale is a game of pure chance, such as tossing a coin. In a long series of bets between two persons, the result is, theoretically, that they will come out even.

When we come to deal with a game of mingled skill and chance, we have a difficult problem before us. Let us compare Mah Jong with poker. Mah Jong is certainly a more complicated game than poker; and as such, there

are more fine points, more varieties of plays, more chance laws, and, in short, more skill is required. But poker is more than a game of skill and chance; it is also a game of patience. Facing a streak of bad luck, the experienced player has only to stay out to cut out heavy losses, coming in occasionally with a strong hand. In poker if A's skill is five per cent over B's, "he will then ruin B if they play long enough, having chances in his favor of nearly thirteen to ten."[1] This being the case, what is the relation of skill and chance in Mah Jong? And, still more specifically, can this relation be expressed in terms of percentage?

[1]Blackbridge's Complete Poker Player, p. 79.

CHAPTER X

Mah Jong Psychology

Subjective and Objective Observations. Mah Jong psychology begins with the usual methods of psychology. The ability to read the minds of your opponents requires, first of all, observation.

Observation is not confined alone to observing others. All human beings are gifted with the same type of natural tendencies, emotions, instincts, impulses, etc. The reaction of an individual to a stimulus under a given circumstance is about the same as that of another individual to the same stimulus under the same circumstance. Observation by an individual of his own conscious action is called subjective or introspective observation. Let me illustrate the application of this principle. On opening the original 13 cards and finding an excellent hand, I feel happy; and at the same time my feeling of happiness expresses itself by my smile. Later on, I have a very high-scoring calling hand. At this point, I find myself shivering; my hand trembles as it goes to the wall to draw a card; and my tone of voice changes. Next time, if I observe an opponent having similar reactions, I can safely infer that he has an excellent hand; it is not necessary for me to have seen his hand, in order to know this.

However, to depend on subjective observation as the only method is not adequate. Since there are individual differences, the observations of one individual cannot be representative of all individuals. When the observer watches how his opponents react to different situations, the observation is objective. If we wish to make our conclusions as trustworthy and as applicable as possible, the two methods must be used together. The chief use of introspection will be that of corroboration.

Some Most Common Indications of Players' State of Mind. In Mah Jong a fast thinker always has the advantage over a slow thinker. A fast thinker allows his opponents no chance to observe his lines of thought, whereas a slow thinker, on account of his irregularity in the speed of discarding, too often betrays the true character of his hand. In building up an all-one-suit hand, he arranges his cards in all sorts of ways. Another thing that a slow thinker generally does is this: He has a calling hand; he holds a white honor or something of the kind in his hand, looks at his cards for a while, and then discards the white honor. To some it may mean that he is fishing the single eye, and that his delay is due to his thinking over whether fishing the white honor will have any advantage over another honor or wind. In truth, he is not fishing the single eye; his white honor is in no way connected with the rest of his hand; he delays in order to make sure as to how many possibilities there are in his calling hand.

Certain remarks during the game may reveal something in a player's hand. Such expressions as "Who is the East Wind?" "Are you calling?" are some typical examples. Sometimes the expression is due to overexcitement. For instance, a player having a pair of red honors declares, "Pung," when some one discards a green honor.

From the way in which a player makes his discards, some knowledge of his hand may also be gained. If a player draws a bamboo and, with apparent disgust, discards it with great rapidity, it may be safely concluded that he has no use at all for that suit.

Attitude of Calling. It is curious to note that it is very common for every player to appear in some distinct physical attitude when calling, as if he were going to give out a special signal "I am calling." One common posture is the sudden straightening of the back. Many a player has his attention suddenly concentrated upon the discarded cards in the center of the table, his eyes traveling

here and there and then around the exposed groups of each player, to see how many chances are still left. Another group of players are carefree; such a player's only interest is to note whether any one is making the right discard and whether he himself is drawing the right card.

Maintaining the Right Kind of Attitude. The above discussion leads us to a single conclusion: a player must at all times maintain the right kind of attitude. Let every player draw and discard his cards in a uniform manner and at the same rate of speed, declaring "pungs" in a low, impassive tone of voice, conversing, when it is necessary, with an air of nonchalance. The eyes and the face are continually watched by the expert for information; it is therefore necessary to prevent these expressive features from telling tales. What is meant by "poker face" is nothing more than the control of the physiological impulses, so that information will not be shown.

Psychology of Bystanders. To many players, bystanders are a menace to clear thinking. To keen experienced players, bystanders often prove to be agencies of news communication. A poor hand makes the bystanders show pity for the "under dog" holder, while a good hand makes them feel joyful, as though they themselves held it; and the keen observer by watching their facial expressions will draw conclusions that in most cases are correct. If a player has an exceptionally good hand, the bystanders behind him will experience an exceptional emotional excitement, and this excitement, because of its intensity, will soon attract the attention of other bystanders, so that when the whole crowd is behind one player, it is a conclusive proof of the excellent nature of his hand.

Inductive and Deductive Reasonings. Inductive reasoning is inference based on the observation of a number of individual cases. Deductive reasoning is inference from some general truth to the application of special cases. We employ, although we may not be aware of it, both of these reasoning processes every minute of the day.

In playing with comparative strangers, deductive reasoning is chiefly used. Principles that are generally true are applied. Most of the principles set forth in this book are general truths and can be adhered to. In playing with acquaintances, the use of inductive reasoning must be added. One should avail himself of the peculiarities characteristic of each player which one has observed through playing with him a number of times. A plays a mechanical game, and each of his discards can be taken as an indication of something. B consistently plays for high-scoring and "cleared" suit[1] hand, and special strategy must be used against him; for instance, if sitting to his right, one should keep those suits which he will not retain. C is a versatile player and more attention should be paid to him, for he always remains dangerous.

In actual practice, there is no sharp line of demarcation as to where induction ends and deduction begins. In fact, as John Dewey points out, the two processes are in most instances joined together. Any complete act of thought involves both induction and deduction.[2]

[1] "Cleared" suit hand means an all-one-suit hand or a mixed-one-suit hand.

[2] John Dewey, How We Think, p. 80.

CHAPTER XI

Mah Jong Methods

Though the origin of the Chinese game of Mah Jong is not definitely known, the history and development of the "cleared-hand" and "one-double" games could be traced, which offer several interesting points for discussion.

When Mah Jong was introduced to the foreign residents in China, many of the novices, who have grasped the elementary principles of the game, were greatly attracted by the glories of the "limit hands." Instead of remembering that the object of the game is to "woo" or "mah jong," they sacrified all in order to obtain one of these ideal hands, which they seldom succeeded due to the fact that other players were contented with winning with an ordinary hand.

A method was then devised by these high-score hunters, known as the "cleared hand," whereby no player was allowed to woo, unless he had a hand containing only one suit, with or without "winds " and "honors."

When these novices had acquired a better knowledge of the game, they began to realize the limitations of such a method. The principal drawback of the cleared-hand game is that, since it is required that a player must have a cleared suit in order to woo, he is obliged to discard tiles of the other suits even if he anticipates that his right-hand player is in need of cards of one of these suits to complete a hand. In other words, in this method, all that the player can do is to choose his longest suit and try to complete the hand with that suit, paying little attention to what the others are doing.

The one-double method was then introduced as a modification of the cleared-hand game. The rule is that no player is permitted to mah jong unless he has at

least one double, not counting his own "Flowers" or "Seasons." This system is an improvement on the one just mentioned.

There is yet another method — the Chinese method — which many writers call the "mixed-suit" game. This term really does not describe the object of the game. It is true that in this mode, a player could mah jong with a hand consisting of cards of more than one suit, yet he is not forced to do so. He could, for instance, win with a one-double hand; or he could woo with a cleared hand. It is evident then that the original method allows the greatest freedom of play, which is the factor that aids the expert against the luck of the novice.

When Mah Jong appeared in America, all the rules with variations came in with it. During the first few months of its existence, people were too busily engaged in attempting to learn the fundamentals to bother about discussing what was the best code of rules to follow. When they had made progress in their play, they were confronted with the variety of rules then prevalent. Heated controversy over these rules began so furiously, that the popularity of the game was threatened, until a set of standardized rules was made. The general headings under which the different codes are classified are, firstly, the cleared hand; secondly, the one double; and thirdly, the mixed suit or the original Chinese game. Mention has been made with regard to the unfortunate restrictions imposed on the first two methods. It suffices at this moment to deliberate upon a few of the salient points of the original game to show that if Mah Jong is to remain in this country, which it undoubtedly will, the Chinese method will be the one to outlast its rivals.

Too much emphasis cannot be laid upon the object of the game, which is to organize a hand so that it will contain one pair of "eyes," and four groups of sequences and or threes or fours of a kind. With this in mind, the player should do his best to woo at the shortest moment with a maximum score. To reach this goal, he is chal-

lenged by three other players, who are striving for the same end. Thus it is evident that a player should not only concentrate his attention in building up his own hand, but should also make an effort to prevent the others from improving theirs. This is especially important when an opponent shows all the symptoms of having a high-scoring or limit hand.

To be able to play offensively at the same time defensively is the aim of the Chinese experts; it is also the nucleus around which good play is built. But alas, both the new methods indirectly tend to preclude this principle of defensive play because of the conditions imposed.

It may be argued that playing with the Chinese rules, the scores are usually so small that it almost makes the game unattractive. But as a rule among experts, they play with a base score which varies between 50 and 100, instead of 10 or 20. This bonus score is decided at the beginning of the game, in the same way the "stake" or "limit" of other games is fixed. The increasing of the base score serves not only as a means of enlarging the stake, but also puts extra weight on the importance of "wooing," which is the object of the game.

Another question often raised is that of the Chinese scoring rules. Generally speaking there are two schools at variance, the liberal and strict constructionists, as shown in Chapter III. Nowadays Chinese experts indulge in the liberal method of play which is the method I recommend to the devotees in America.

LIBRARY OF CONGRESS
00014402792